STIC Search Report
Biotech-Chem Library

STIC Database Tracking Number: 149916

TO: Rei-Tsang Shiao **Location: 5a10 / 5c18** **Tuesday, April 12, 2005** **Art Unit: 1626** **Phone: 571-272-0707** **Serial Number: 10 / 617431**	**From: Jan Delaval** **Location: Biotech-Chem Library** **Remsen 1a51** **Phone: 571-272-22504** **jan.delaval@uspto.gov**

Search Notes

Requester's Full Name: Robert (Kelly) Shiao Examiner #: 79521 Date: 04/05, 2005

Art Unit: 1626 Phone Number 2-0707 Serial Number: 10/617,431

Mail Box and Bldg/Room Location: 5A10/5C18 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need. ME

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Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: New fluorous tagging

Inventors (please provide full names): Zhang et al.

Earliest Priority Filing Date:

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

I. Search cpd I (see claim 73) and scheme 1 & 2

$X-CR^1R^2-C_6H_{5-m}[W_p(CH_2)_nR_f]_m$ cpd =

leaving gp. i.e.

1. X is halogen, methane sulfonate, p-toluenesulfonate, trifluoromethanesulfonate,

2. R^1, R^2 are sub

3. m is 1~5

4. p is 0, or 1

5. n is 0 to 5

6. R_f is ~~C$_q$F$_{2q+1}$~~ C_qF_{2q+1}

q is 1~10

r is 0~5

s is 1~20

STAFF USE ONLY

Searcher: Jan

Searcher Phone #: 272504

Searcher Location:

Date Searcher Picked Up: 4/11/05

Date Completed: 4/12/05

Searcher Prep & Review Time:

Clerical Prep Time: 60

Online Time: 1/2 hr

Type of Search

NA Sequence (#)

AA Sequence (#)

Structure (#) ✓

Bibliographic

Litigation

Fulltext

Patent Family

Other

Vendors and cost where applicable

STN ✓

Dialog

Questel/Orbit

Dr.Link

Lexis/Nexis

Sequence Systems

WWW/Internet

Other (specify)

PTO-1590 (8-01)

=> fil reg
FILE 'REGISTRY' ENTERED AT 07:12:31 ON 12 APR 2005

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 11 APR 2005 HIGHEST RN 848290-51-7
DICTIONARY FILE UPDATES: 11 APR 2005 HIGHEST RN 848290-51-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

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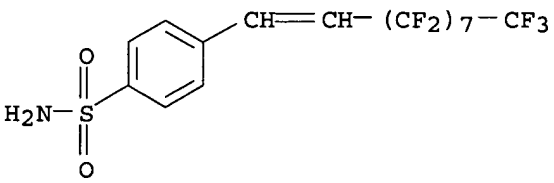
* *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
* *
****

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=> d l26 ide can tot

L26 ANSWER 1 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN
RN **649561-74-0** REGISTRY
ED Entered STN: 12 Feb 2004
CN Benzenesulfonamide, 4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-1-decenyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF **C16 H8 F17 N O2 S**
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



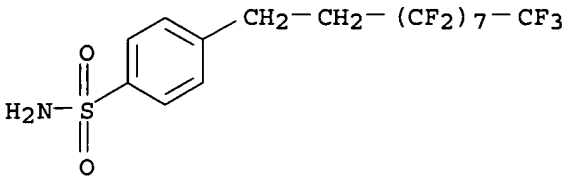
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:128148

L26 ANSWER 2 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN

RN **649561-73-9** REGISTRY
ED Entered STN: 12 Feb 2004
CN Benzenesulfonamide, 4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF **C16 H10 F17 N O2 S**
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



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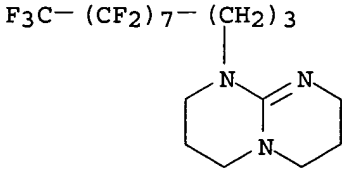
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:128148

L26 ANSWER 3 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN
RN **649561-68-2** REGISTRY
ED Entered STN: 12 Feb 2004
CN 2H-Pyrimido[1,2-a]pyrimidine, 1-(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoroundecyl)-1,3,4,6,7,8-hexahydro- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF **C18 H18 F17 N3**
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



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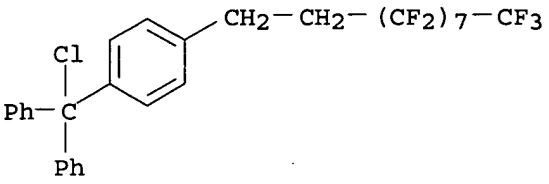
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:128148

L26 ANSWER 4 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN
RN **649561-67-1** REGISTRY
ED Entered STN: 12 Feb 2004
CN Benzene, 1-(chlorodiphenylmethyl)-4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)- (9CI) (CA INDEX NAME)
MF **C29 H18 Cl F17**
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

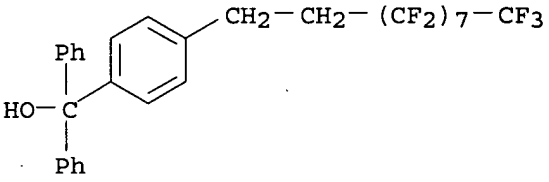


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:128148

L26 ANSWER 5 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN
RN **649561-66-0** REGISTRY
ED Entered STN: 12 Feb 2004
CN Benzenemethanol, 4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)-α,α-diphenyl- (9CI) (CA INDEX NAME)
MF **C29 H19 F17 O**
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

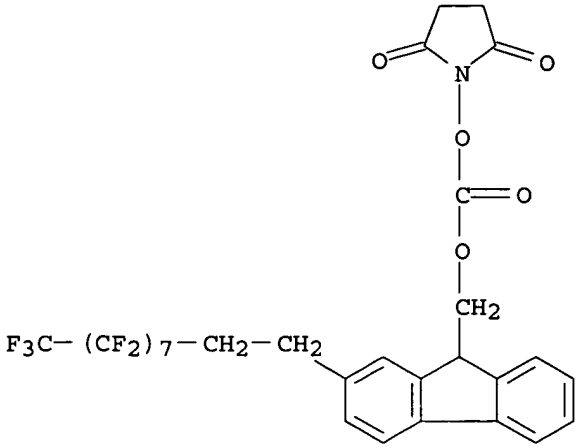


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:128148

L26 ANSWER 6 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN
RN **649561-59-1** REGISTRY
ED Entered STN: 12 Feb 2004
CN 2,5-Pyrrolidinedione, 1-[[[[2-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)-9H-fluoren-9-yl]methoxy]carbonyl]oxy]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF **C29 H18 F17 N O5**
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

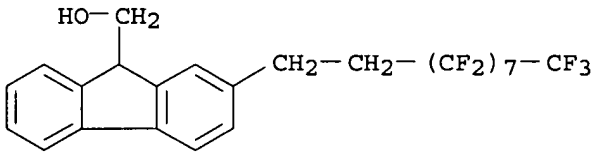


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:128148

L26 ANSWER 7 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN
RN **649561-58-0** REGISTRY
ED Entered STN: 12 Feb 2004
CN 9H-Fluorene-9-methanol, 2-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF **C24 H15 F17 O**
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

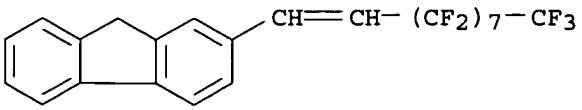


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:128148

L26 ANSWER 8 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN
RN **649561-57-9** REGISTRY
ED Entered STN: 12 Feb 2004
CN 9H-Fluorene, 2-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-1-decenyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF **C23 H11 F17**
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

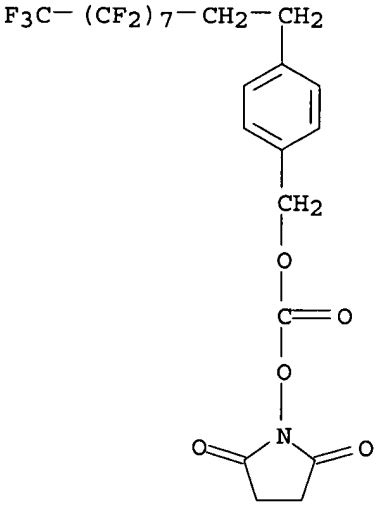


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:128148

L26 ANSWER 9 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN
RN **556050-49-8** REGISTRY
ED Entered STN: 28 Jul 2003
CN 2,5-Pyrrolidinedione, 1-[[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methoxy]carbonyl]oxy]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF **C22 H14 F17 N O5**
SR CA
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL



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3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

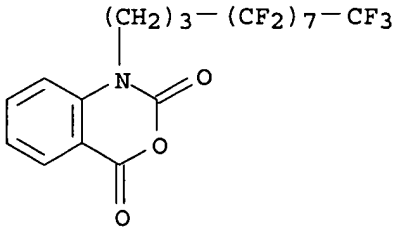
REFERENCE 1: 142:134436

REFERENCE 2: 140:128148

REFERENCE 3: 139:85611

L26 ANSWER 10 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN
RN **544418-04-4** REGISTRY
ED Entered STN: 08 Jul 2003
CN 2H-3,1-Benzoxazine-2,4(1H)-dione, 1-(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1

1-heptadecafluoroundecyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF **C19 H10 F17 N O3**
SR CA
LC STN Files: CA, CAPLUS, CASREACT, CHEMCATS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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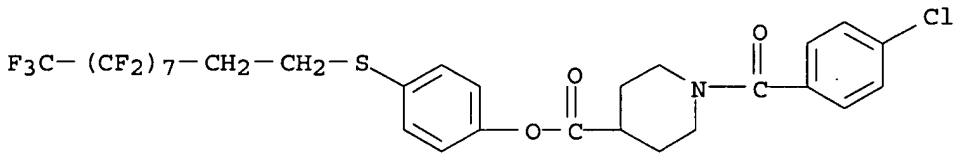
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:128148

REFERENCE 2: 139:36318

L26 ANSWER 11 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN
RN **514221-87-5** REGISTRY
ED Entered STN: 12 May 2003
CN 4-Piperidinecarboxylic acid, 1-(4-chlorobenzoyl)-, 4-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)thio]phenyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF **C29 H21 Cl F17 N O3 S**
SR CA
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

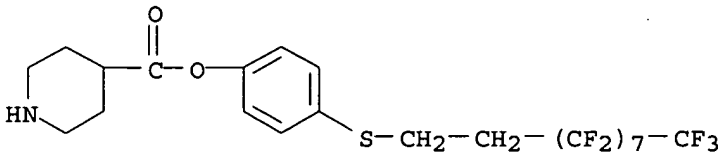
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:128148

REFERENCE 2: 138:320984

L26 ANSWER 12 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN
RN **514221-86-4** REGISTRY
ED Entered STN: 12 May 2003
CN 4-Piperidinecarboxylic acid, 4-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)thio]phenyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD

MF **C22 H18 F17 N O2 S**
SR CA
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL



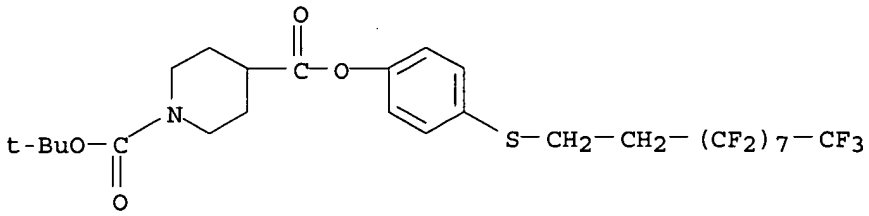
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:128148

REFERENCE 2: 138:320984

L26 ANSWER 13 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN
RN **514221-85-3** REGISTRY
ED Entered STN: 12 May 2003
CN 1,4-Piperidinedicarboxylic acid, 1-(1,1-dimethylethyl) 4-[4-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)thio]phenyl] ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF **C27 H26 F17 N O4 S**
SR CA
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

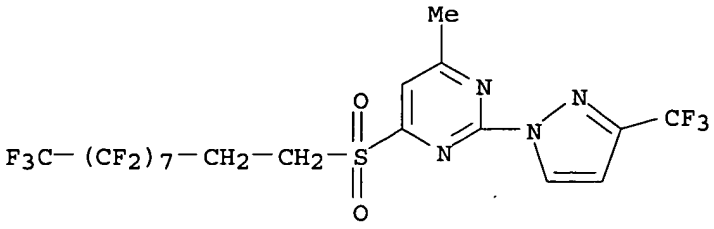
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:128148

REFERENCE 2: 138:320984

L26 ANSWER 14 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN
RN **501701-51-5** REGISTRY
ED Entered STN: 04 Apr 2003
CN Pyrimidine, 4-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)sulfonyl]-6-methyl-2-[3-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF **C19 H10 F20 N4 O2 S**

SR CA
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL



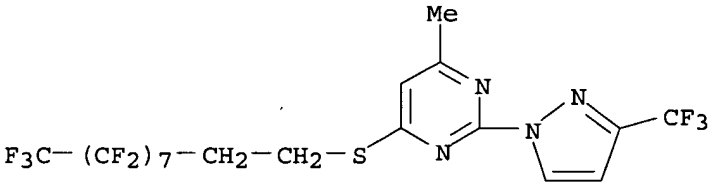
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:128148

REFERENCE 2: 138:238126

L26 ANSWER 15 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN
RN **501701-50-4** REGISTRY
ED Entered STN: 04 Apr 2003
CN Pyrimidine, 4-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)thio]-6-methyl-2-[3-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF **C19 H10 F20 N4 S**
SR CA
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

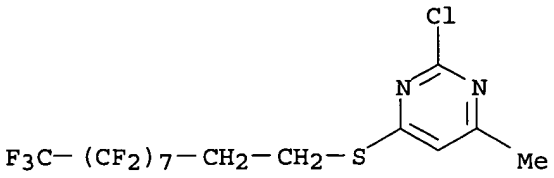
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:128148

REFERENCE 2: 138:238126

L26 ANSWER 16 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN
RN **501701-48-0** REGISTRY
ED Entered STN: 04 Apr 2003
CN Pyrimidine, 2-chloro-4-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)thio]-6-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF **C15 H8 Cl F17 N2 S**
SR CA

LC STN Files: CA, CAPLUS, CASREACT, USPATFULL



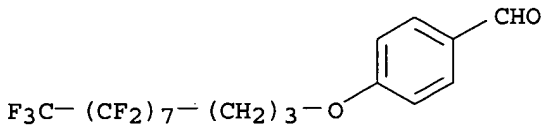
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:128148

REFERENCE 2: 138:238126

L26 ANSWER 17 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN
RN **494798-73-1** REGISTRY
ED Entered STN: 25 Feb 2003
CN Benzaldehyde, 4-[(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoroundecyl)oxy]- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 4-[[3-(Perfluorooctyl)propyl]oxy]benzaldehyde
FS 3D CONCORD
MF **C18 H11 F17 O2**
SR CA
LC STN Files: CA, CAPLUS, CASREACT, CHEMCATS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

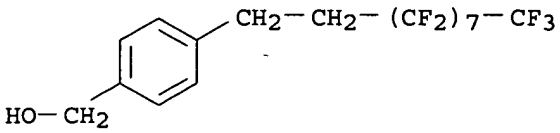
3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:366039

REFERENCE 2: 140:128148

REFERENCE 3: 138:136691

L26 ANSWER 18 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN
RN **356055-77-1** REGISTRY
ED Entered STN: 12 Sep 2001
CN Benzenemethanol, 4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF **C17 H11 F17 O**
SR CA
LC STN Files: CA, CAPLUS, CASREACT, CHEMCATS, CSCHEM, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

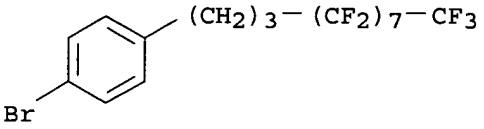
REFERENCE 1: 140:128148

REFERENCE 2: 139:85611

REFERENCE 3: 135:256798

REFERENCE 4: 135:195695

L26 ANSWER 19 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN
RN 353525-52-7 REGISTRY
ED Entered STN: 29 Aug 2001
CN Benzene, 1-bromo-4-(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoroundecyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF **C17 H10 Br F17**
SR CA
LC STN Files: CA, CAPLUS, CASREACT

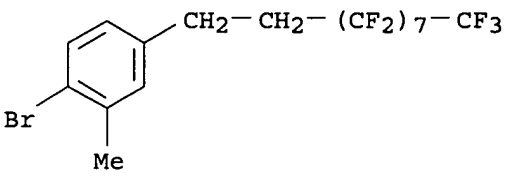


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 135:166911

L26 ANSWER 20 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN
RN 340157-99-5 REGISTRY
ED Entered STN: 08 Jun 2001
CN Benzene, 1-bromo-4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)-2-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF **C17 H10 Br F17**
SR CA
LC STN Files: CA, CAPLUS, CASREACT

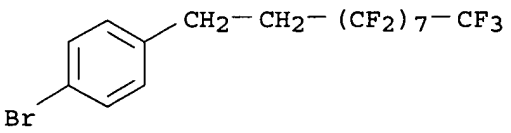


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:366630

L26 ANSWER 21 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN
RN **195324-88-0** REGISTRY
ED Entered STN: 14 Oct 1997
CN Benzene, 1-bromo-4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1-Bromo-4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)benzene
FS 3D CONCORD
MF **C16 H8 Br F17**
SR CA
LC STN Files: CA, CAPLUS, CASREACT, CHEMCATS, CSCHEM, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

10 REFERENCES IN FILE CA (1907 TO DATE)
10 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:405395

REFERENCE 2: 140:128148

REFERENCE 3: 138:204515

REFERENCE 4: 137:262818

REFERENCE 5: 135:256798

REFERENCE 6: 135:195695

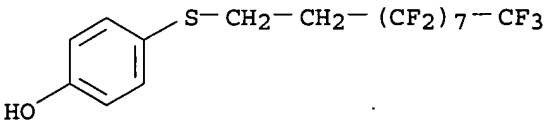
REFERENCE 7: 134:366630

REFERENCE 8: 134:178294

REFERENCE 9: 129:175353

REFERENCE 10: 127:242400

L26 ANSWER 22 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN
RN **142623-70-9** REGISTRY
ED Entered STN: 24 Jul 1992
CN Phenol, 4-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)thio]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF **C16 H9 F17 O S**
SR CA
LC STN Files: CA, CAPLUS, CASREACT, CHEMCATS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:128148

REFERENCE 2: 138:320984

REFERENCE 3: 117:101039

=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 07:12:40 ON 12 APR 2005
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FILE COVERS 1907 - 12 Apr 2005 VOL 142 ISS 16
FILE LAST UPDATED: 11 Apr 2005 (20050411/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d l33 all hitstr tot

L33 ANSWER 1 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:60433 HCAPLUS
DN 140:128148
ED Entered STN: 26 Jan 2004
TI A method for preparing new fluorous tagging and scavenging reactants and uses thereof

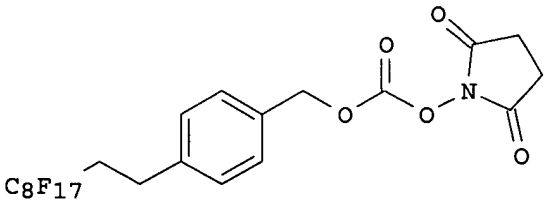
IN Zhang, Wei; Luo, Zhiyong; Nagashima, Tadamichi; Chen, Christine Hiu-Tung; Yu, Marvin S.
PA Fluorous Technologies Incorporated, USA
SO PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07C
CC 25-3 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004007407	A2	20040122	WO 2003-US21686	20030711 <--
	WO 2004007407	A3	20041125		
	W: CA, JP				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
	US 2004073054	A1	20040415	US 2003-617431	20030711 <--
PRAI	US 2002-395067P	P	20020711 <--		
	US 2002-396952P	P	20020718		
	US 2003-442712P	P	20030127		
	US 2003-442762P	P	20030127		
	US 2003-442840P	P	20030127		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2004007407	ICM	C07C
US 2004073054	ECLA	C07B051/00; C07D213/74; C07D213/74C; C07D217/04; C07D217/06; C07D231/38; C07D265/26B; C07D401/12+211+209C; C07D401/14+239B+231+217; C07D401/14+239B+231+213; C07D403/04+239B+231; C07D403/14+239B+239B+231; C07D417/14+277+239B+231; C07D417/14+285B+239B+231; C07D471/04+239C+221C; C07D487/04+239C+239C+2; C07D491/10+317B+221B; C07B063/02; C07C017/16+22/08; C07C022/08; C07C043/23; C07C045/71+47/575; C07C047/575; C07C053/50; C07C211/14; C07C211/15; C07C213/00; C07C265/04; C07C273/18B2B; C07C311/16; C07C323/20; C07C335/16; C07D207/46; C07D209/14; C07D209/16; C07D211/62 <--

OS MARPAT 140:128148
GI



I

AB The present invention includes methods and compns. for increasing the fluorous nature of an organic compound, which contains at least one functional group reactive with group X, by reacting it with at least one fluorous compound of formula XCR1R2(C6H5)m[Wp(CH2)nRf]m [wherein X = a leaving group, a nucleophilic group, or an electrophilic group; R1 and R2 = independently H, alkyl, Ph, (C6R5)q(W')q, or (C6H5)m'[Wp'(CH2)n'Rf]m'; m and m' = independently 1-5; n and n' = independently 0-5; p and p' = independently 0 or 1; q = 0-5; W = O, S, NR3, CR4R5, SIR6R7; W' = OR8, SR9, NR10R11, CR12R13R14, or SiR15R16R17; R3, R4, R5, R8-R14 = independently H, alkyl, aryl, benzyl, or (CH2)n''Rf; R6, R7, R15-R17 = independently alkyl, aryl,

benzyl, or (CH2)n''Rf; n'' = 0-5; Rf = perfluoroalkyl, a fluorinated either, or a fluorinate amine; with provisos] to produce a fluorous tagged organic compound The increased fluorous nature of the fluorous tagged organic compound may then be used to sep. the fluorous organic compound from untagged reagents, reactants, catalysts, and/or products derived from it. The resultant fluorous tagged organic compound may also be subjected to subsequent chemical transformations, wherein the fluorous nature of the tagged compound is used to increase the ease of separation of the fluorous tagged organic compound from untagged reagents, reactants, catalysts, and/or products derived therefrom, after each chemical transformation. The chemical transformations result in a second fluorous tagged organic compound, which may be reduced by removing the fluorous group thereby producing a second organic compound The second organic compound may be employed as a pharmaceutical compound or intermediate or as a combinatorial library component. For example, reaction of 4-(1H,1H,2H,2H-perfluorodecyl)benzyl alc. with phosgene in anhydrous THF, followed by coupling with N-hydroxysuccinimide dicyclohexylamine salt in chloroform and workup, provided I (82%).

ST fluorous tagging scavenging reactant prepn fluoroalkylation; combinatorial library fluoroalkyl benzene deriv prepn

IT Haloalkylation
(fluoroalkylation; preparation of new fluorous tagging and scavenging reactants and uses thereof)

IT Scavengers
(fluorous electrophilic; preparation of new fluorous tagging and scavenging reactants and uses thereof)

IT Organic compounds, preparation
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(fluorous tagged; preparation of new fluorous tagging and scavenging reactants and uses thereof)

IT Combinatorial library
(preparation of new fluorous tagging and scavenging reactants and uses thereof)

IT 142010-50-2P **501701-51-5P 514221-87-5P 544418-04-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(fluorous tagging and scavenging compound; preparation of new fluorous tagging and scavenging reactants and uses thereof)

IT 17002-69-6P **494798-73-1P**, 4-[[3-(Perfluorooctyl)propyl]oxy]benzaldehyde **556050-49-8P 649561-59-1P 649561-67-1P 649561-68-2P 649561-73-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(fluorous tagging and scavenging compound; preparation of new fluorous tagging and scavenging reactants and uses thereof)

IT **142623-70-9P 501701-48-0P 501701-50-4P 514221-85-3P 514221-86-4P 649561-57-9P 649561-58-0P 649561-66-0P** 649561-69-3P **649561-74-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of new fluorous tagging and scavenging reactants and uses thereof)

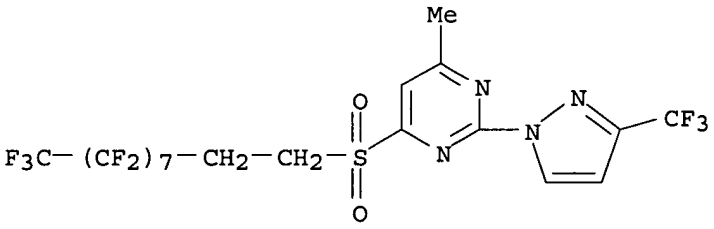
IT 61-54-1, 3-Indoleethanamine 91-21-4, 1,2,3,4-Tetrahydroisoquinoline 100-07-2, 4-Methoxybenzoyl chloride 103-71-9, Phenyl isocyanate, reactions 103-72-0, Phenyl isothiocyanate 104-84-7, 4-Methylbenzylamine 110-91-8, Morpholine, reactions 111-40-0, Diethylenetriamine 118-48-9, Isatoic anhydride 119-61-9, Benzophenone, reactions 122-01-0, 4-Chlorobenzoyl chloride 153-78-6, 2-Aminofluorene 637-89-8, 4-Mercaptophenol 701-34-8, 4-Bromobenzenesulfonamide

2043-53-0 2211-94-1, 2-[(4-Methoxyphenoxy)methyl]oxirane 5424-21-5, 2,4-Dichloro-6-methylpyrimidine 5807-14-7 20154-03-4, 3-Trifluoromethylpyrazole 21652-58-4, 1H,1H,2H-Perfluorodec-1-ene 28777-87-9, Hydroxybenzaldehyde 34143-74-3 34803-66-2, 1-(2-Pyridyl)piperazine 82911-72-6 84358-13-4 89373-67-1 **195324-88-0** 200112-75-0, 3-(Perfluorooctyl)propyl iodide **356055-77-1**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of new fluorous tagging and scavenging reactants and uses thereof)

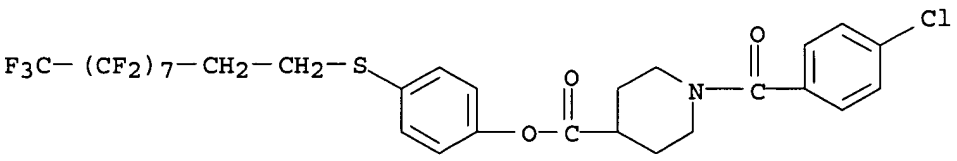
IT 3083-88-3P 6336-01-2P 32569-50-9P 32585-51-6P 35305-46-5P 35305-48-7P 83491-16-1P 89652-23-3P 330865-56-0P 331631-15-3P 333768-48-2P 377767-02-7P 433706-16-2P 501701-52-6P 501701-53-7P 501701-54-8P 501701-55-9P 501701-56-0P 501701-57-1P 501701-58-2P 501701-59-3P 501701-60-6P 501701-61-7P 503429-92-3P 514221-95-5P 514221-96-6P 514221-98-8P 514221-99-9P 514222-01-6P 544418-15-7P 649561-60-4P 649561-61-5P 649561-62-6P 649561-65-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of new fluorous tagging and scavenging reactants and uses thereof)

IT **501701-51-5P 514221-87-5P 544418-04-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(fluorous tagging and scavenging compound; preparation of new fluorous tagging and scavenging reactants and uses thereof)

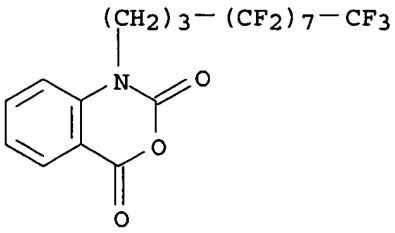
RN 501701-51-5 HCAPLUS
CN Pyrimidine, 4-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)sulfonyl]-6-methyl-2-[3-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)



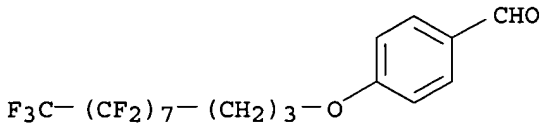
RN 514221-87-5 HCAPLUS
CN 4-Piperidinecarboxylic acid, 1-(4-chlorobenzoyl)-, 4-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)thio]phenyl ester (9CI) (CA INDEX NAME)



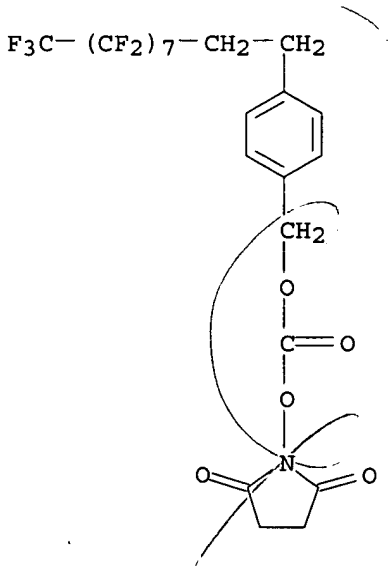
RN 544418-04-4 HCAPLUS
CN 2H-3,1-Benzoxazine-2,4(1H)-dione, 1-(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoroundecyl)- (9CI) (CA INDEX NAME)



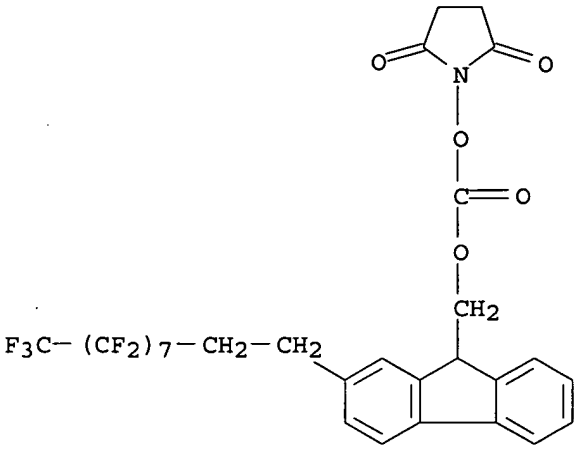
IT **494798-73-1P**, 4-[[3-(Perfluorooctyl)propyl]oxy]benzaldehyde
556050-49-8P 649561-59-1P 649561-67-1P
649561-68-2P 649561-73-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(fluorous tagging and scavenging compound; preparation of new fluorous tagging
and scavenging reactants and uses thereof)
RN 494798-73-1 HCAPLUS
CN Benzaldehyde, 4-[(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoroundecyl)oxy]- (9CI) (CA INDEX NAME)



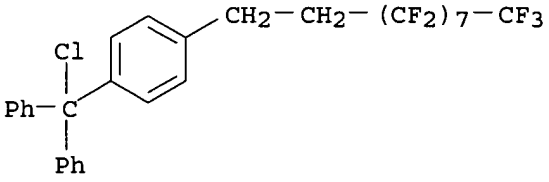
RN 556050-49-8 HCAPLUS
CN 2,5-Pyrrolidinedione, 1-[[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methoxy]carbonyl]oxy]- (9CI) (CA INDEX NAME)



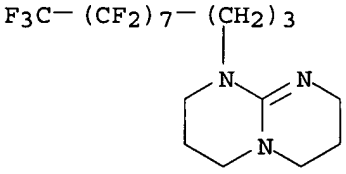
RN 649561-59-1 HCAPLUS
CN 2,5-Pyrrolidinedione, 1-[[[[2-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)-9H-fluoren-9-yl]methoxy]carbonyl]oxy]- (9CI) (CA INDEX NAME)



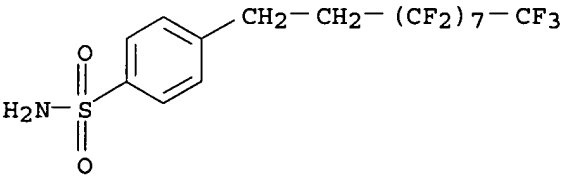
RN 649561-67-1 HCAPLUS
CN Benzene, 1-(chlorodiphenylmethyl)-4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)- (9CI) (CA INDEX NAME)



RN 649561-68-2 HCAPLUS
CN 2H-Pyrimido[1,2-a]pyrimidine, 1-(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoroundecyl)-1,3,4,6,7,8-hexahydro- (9CI) (CA INDEX NAME)



RN 649561-73-9 HCAPLUS
CN Benzenesulfonamide, 4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)- (9CI) (CA INDEX NAME)

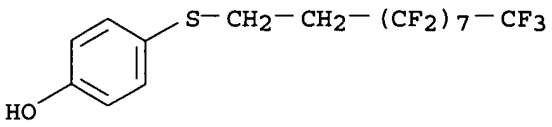


IT **142623-70-9P 501701-48-0P 501701-50-4P**
514221-85-3P 514221-86-4P 649561-57-9P
649561-58-0P 649561-66-0P 649561-74-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of new fluorous tagging and scavenging reactants and uses thereof)

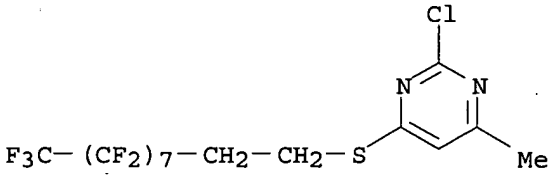
RN 142623-70-9 HCAPLUS

CN Phenol, 4-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)thio]- (9CI) (CA INDEX NAME)



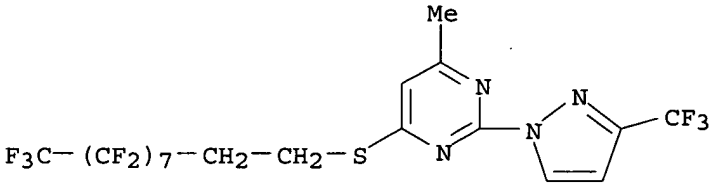
RN 501701-48-0 HCAPLUS

CN Pyrimidine, 2-chloro-4-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)thio]-6-methyl- (9CI) (CA INDEX NAME)



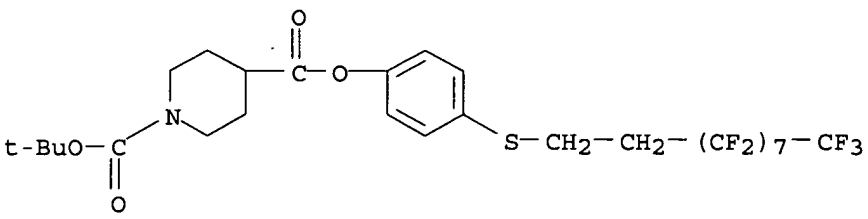
RN 501701-50-4 HCAPLUS

CN Pyrimidine, 4-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)thio]-6-methyl-2-[3-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)



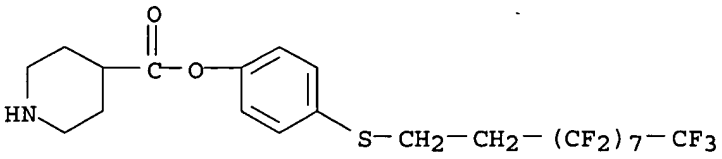
RN 514221-85-3 HCAPLUS

CN 1,4-Piperidinedicarboxylic acid, 1-(1,1-dimethylethyl) 4-[4-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)thio]phenyl] ester (9CI) (CA INDEX NAME)

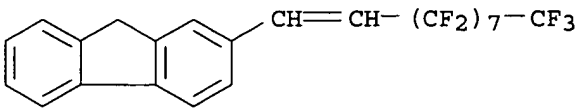


RN 514221-86-4 HCAPLUS

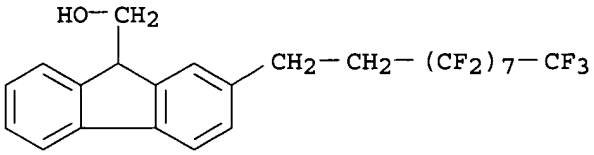
CN 4-Piperidinecarboxylic acid, 4-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)thio]phenyl ester (9CI) (CA INDEX NAME)



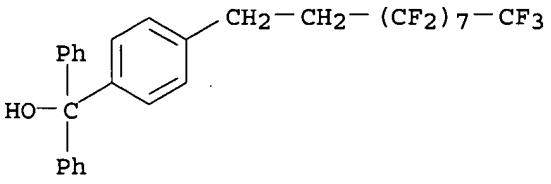
RN 649561-57-9 HCAPLUS
CN 9H-Fluorene, 2-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-1-decenyl)- (9CI) (CA INDEX NAME)



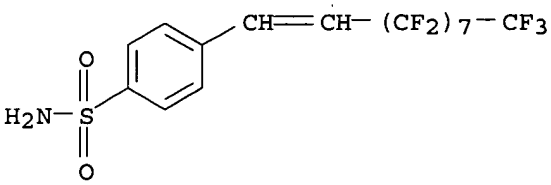
RN 649561-58-0 HCAPLUS
CN 9H-Fluorene-9-methanol, 2-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)- (9CI) (CA INDEX NAME)



RN 649561-66-0 HCAPLUS
CN Benzenemethanol, 4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)-α,α-diphenyl- (9CI) (CA INDEX NAME)

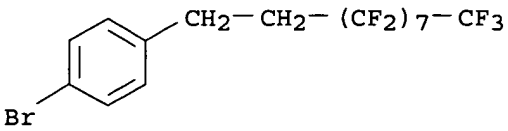


RN 649561-74-0 HCAPLUS
CN Benzenesulfonamide, 4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-1-decenyl)- (9CI) (CA INDEX NAME)

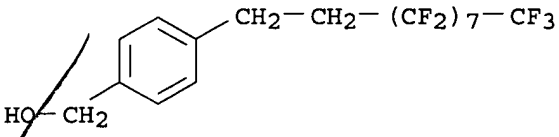


IT **195324-88-0 356055-77-1**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of new fluorous tagging and scavenging reactants and uses thereof)

RN 195324-88-0 HCAPLUS
CN Benzene, 1-bromo-4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)- (9CI) (CA INDEX NAME)



RN 356055-77-1 HCAPLUS
CN Benzenemethanol, 4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)- (9CI) (CA INDEX NAME)



L33 ANSWER 2 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:154376 HCAPLUS
DN 138:204515
ED Entered STN: 28 Feb 2003
TI Fluorous nucleophilic substitution of alcohols and reagents for use therein, specifically, perfluoroalkyl-containing phosphines and azodicarboxylates as polyfluorinated reagents for the Mitsunobu reaction
IN Curran, Dennis P.; Dandapani, Sivaraman
PA University of Pittsburgh, USA
SO PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07B063-00
ICS C07B045-00; C07B041-12; C07C067-08; C07C303-40; C07C311-58
CC 21-2 (General Organic Chemistry)
Section cross-reference(s): 45
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003016246	A1	20030227	WO 2002-US26045	20020815 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 6806357	B1	20041019	US 2001-932903	20010820 <--
	EP 1419126	A1	20040519	EP 2002-757153	20020815 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
	JP 2005508890	T2	20050407	JP 2003-521175	20020815 <--
PRAI	US 2001-932903	A	20010820 <--		
	WO 2002-US26045	W	20020815		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
WO 2003016246	ICM	C07B063-00	
	ICS	C07B045-00; C07B041-12; C07C067-08; C07C303-40; C07C311-58	
WO 2003016246	ECLA	C07B041/12; C07B063/00; C07C067/08; C07C281/02; C07C281/20; C07C303/40	<--
US 6806357	ECLA	C07B041/12; C07B063/00; C07C067/08; C07C281/02; C07C281/20; C07C303/40	<--
JP 2005508890	FTERM	4C204/AB20; 4C204/BB10; 4C204/CB04; 4C204/DB01; 4C204/EB01; 4C204/FB03; 4C204/FB04; 4C204/FB10; 4C204/GB01; 4H006/AA02; 4H006/AC48; 4H006/AC90; 4H006/KA06	<--

OS CASREACT 138:204515; MARPAT 138:204515

AB Phosphine and azodicarboxylate reagents containing perfluoroalkyl groups are employed in the Mitsunobu reaction of alcs. with acids, imides, and sulfonamides. Claims cover a method of effecting a nucleophilic substitution of an alc. to produce a target product which involves reaction of the alc. with a nucleophile, using an azodicarboxylate and a phosphine which contain between them at least one "fluorous tag", i.e., a perfluoroalkyl group. These fluorinated reagents and the byproducts they form are readily removed from the reaction mixture by separation techniques which target perfluorinated substances, e.g., liquid-liquid or solid-liquid extraction Such "fluorous" separation techniques are superior to standard chromatog. separation methods, which are less effective and are undesirable for both industrial and combinatorial use. Several examples of both types of Mitsunobu reagents were prepared and used. For instance, CF3(CF2)5CH2CH2I (RFI) reacted with Zn in THF, and then with 4-IC6H4Br in the presence of Pd(PPh3)4, to give 53% 4-RFC6H4Br. This bromide was lithiated with tert-BuLi and then coupled with PhPCl2 to give 81% yield of the triarylphosphine (4-RFC6H4)2PPh (I). Similarly, the alc. CF3(CF2)5CH2CH2OH (RFOH) was esterified with carbonyldiimidazole and coupled with hydrazine hydrochloride in the presence of Et3N to give 85% RFO2CNHNHCO2RF. Oxidation of this hydrazine derivative with Br2 in the presence of pyridine gave 100% RFO2CN:NCO2RF (II). Mitsunobu reaction of EtOH with 3,5-dinitrobenzoic acid was carried out in THF using I and II, stirring overnight at room temperature Separation of the reaction mixture using fluorous reverse-phase silica gel chromatog., eluting with 80% MeOH, gave (1) an organic fraction containing Et 3,5-dinitrobenzoate in 92% yield and 100% purity, and (2) a mixture of fluorous byproducts consisting of the corresponding hydrazine (80%) and phosphine oxide (86%). The byproducts are easily recycled by oxidation and reduction, resp., in nearly quant. yields. A variety of other reactants, reagents, exptl. conditions, and procedural variants were studied.

ST fluorous nucleophilic substitution alc; Mitsunobu perfluoroalkyl phosphine azodicarboxylate reagent; phthalimide nitrobenzoate toluenesulfonamide nitrophenylbutyrate Mitsunobu alc fluorous reagent; combinatorial industrial chem Mitsunobu reagent

IT Dehydration reaction
(Mitsunobu reaction; nucleophilic substitution of alcs. by Mitsunobu reaction using perfluoroalkyl-containing phosphine and azodicarboxylate reagents)

IT Alkylation
Esterification
Substitution reaction, nucleophilic
(Mitsunobu; nucleophilic substitution of alcs. by Mitsunobu reaction

using perfluoroalkyl-containing phosphine and azodicarboxylate reagents)

IT Dehydration reaction
(agents; nucleophilic substitution of alcs. by Mitsunobu reaction using perfluoroalkyl-containing phosphine and azodicarboxylate reagents)

IT Alkyl groups
(perfluoroalkyl; nucleophilic substitution of alcs. by Mitsunobu reaction using perfluoroalkyl-containing phosphine and azodicarboxylate reagents)

IT Esters, preparation
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(products; nucleophilic substitution of alcs. by Mitsunobu reaction using perfluoroalkyl-containing phosphine and azodicarboxylate reagents)

IT Imides
Sulfonamides
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(reactants and products; nucleophilic substitution of alcs. by Mitsunobu reaction using perfluoroalkyl-containing phosphine and azodicarboxylate reagents)

IT Alcohols, reactions
Carboxylic acids, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactants; nucleophilic substitution of alcs. by Mitsunobu reaction using perfluoroalkyl-containing phosphine and azodicarboxylate reagents)

IT Combinatorial chemistry
(reagents for; nucleophilic substitution of alcs. by Mitsunobu reaction using perfluoroalkyl-containing phosphine and azodicarboxylate reagents)

IT 304-17-6P, N-Isopropylphthalimide 318-49-0P, N-(p-Fluorobenzyl)phthalimide 550-44-7P, N-Methylphthalimide 618-71-3P, Ethyl 3,5-dinitrobenzoate 2702-58-1P, Methyl 3,5-dinitrobenzoate 5022-29-7P, N-Ethylphthalimide 5428-09-1P, N-Allylphthalimide 10477-99-3P, Isopropyl 3,5-dinitrobenzoate 20637-02-9P, Methyl 4-(4-nitrophenyl)butyrate 54619-90-8P, Allyl 3,5-dinitrobenzoate 56805-36-8P, N-Methyl-N-(tert-butoxycarbonyl)-p-toluenesulfonamide 462996-05-0P, p-Fluorobenzyl 3,5-dinitrobenzoate 462996-06-1P, N-Allyl-N-(tert-butoxycarbonyl)-p-toluenesulfonamide 462996-07-2P, N-(p-Fluorobenzyl)-N-(tert-butoxycarbonyl)-p-toluenesulfonamide 462996-08-3P, Allyl 4-(4-nitrophenyl)butyrate 462996-09-4P, p-Fluorobenzyl 4-(4-nitrophenyl)butyrate
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(Mitsunobu product; nucleophilic substitution of alcs. by Mitsunobu reaction using perfluoroalkyl-containing phosphine and azodicarboxylate reagents)

IT 64-17-5, Ethanol, reactions 67-56-1, Methanol, reactions 67-63-0, Isopropanol, reactions 85-41-6, Phthalimide 99-34-3, 3,5-Dinitrobenzoic acid 107-18-6, Allyl alcohol, reactions 459-56-3, p-Fluorobenzyl alcohol 5600-62-4, 4-(4-Nitrophenyl)butyric acid 18303-04-3, N-(tert-Butoxycarbonyl)-p-toluenesulfonamide
RL: RCT (Reactant); RACT (Reactant or reagent)
(Mitsunobu reactant; nucleophilic substitution of alcs. by Mitsunobu reaction using perfluoroalkyl-containing phosphine and azodicarboxylate reagents)

IT 290827-85-9P, Phenylbis[4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)phenyl]phosphane oxide
RL: BYP (Byproduct); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(byproduct; nucleophilic substitution of alcs. by Mitsunobu reaction using perfluoroalkyl-containing phosphine and azodicarboxylate reagents)

IT 290827-94-0P, Phenylbis[4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)phenyl]phosphane 452912-11-7P, Bis(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl) azodicarboxylate

462996-01-6P, Bis(4,4,5,5,6,6,7,7,8,8,9,9,9-tridecafluorononyl azodicarboxylate 462996-04-9P, Diphenyl[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]phosphane
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(invention Mitsunobu reagent; nucleophilic substitution of alcs. by Mitsunobu reaction using perfluoroalkyl-containing phosphine and azodicarboxylate reagents)

IT 1972-28-7, DEAD
RL: RCT (Reactant); RACT (Reactant or reagent)
(non-invention Mitsunobu reagent; nucleophilic substitution of alcs. by Mitsunobu reaction using perfluoroalkyl-containing phosphine and azodicarboxylate reagents)

IT 936-58-3P, α-Allylbenzyl alcohol 120848-76-2P, 2-(Piperidin-4-ylcarbonyl)-1,2,3,4-tetrahydroisoquinoline
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(other product; nucleophilic substitution of alcs. by Mitsunobu reaction using perfluoroalkyl-containing phosphine and azodicarboxylate reagents)

IT 100-52-7, Benzaldehyde, reactions 192212-66-1, Allyltris(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)stannane 217805-02-2, Allyltris(4,4,5,5,6,6,7,7,8,8,9,9,9-tridecafluorononyl)stannane 350716-46-0, 1,1-Bis(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)ethyl 4-[(1,2,3,4-tetrahydroisoquinolin-2-yl)carbonyl]piperidine-1-carboxylate 350716-52-8, 1,1-Bis(4,4,5,5,6,6,7,7,8,8,9,9,9-tridecafluorononyl)ethyl 4-[(1,2,3,4-tetrahydroisoquinolin-2-yl)carbonyl]piperidine-1-carboxylate
RL: RCT (Reactant); RACT (Reactant or reagent)
(other reactant; nucleophilic substitution of alcs. by Mitsunobu reaction using perfluoroalkyl-containing phosphine and azodicarboxylate reagents)

IT 452912-12-8P, Bis(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl) hydrazine-1,2-dicarboxylate
RL: BYP (Byproduct); IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(reagent intermediate and byproduct; nucleophilic substitution of alcs. by Mitsunobu reaction using perfluoroalkyl-containing phosphine and azodicarboxylate reagents)

IT 80806-68-4P, 4,4,5,5,6,6,7,7,8,8,9,9,9-Tridecafluorononan-1-ol 195324-87-9P, 1-Bromo-4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)benzene **195324-88-0P**, 1-Bromo-4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)benzene 462995-97-7P, Bis(4,4,5,5,6,6,7,7,8,8,9,9,9-tridecafluorononyl hydrazine-1,2-dicarboxylate
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(reagent intermediate; nucleophilic substitution of alcs. by Mitsunobu reaction using perfluoroalkyl-containing phosphine and azodicarboxylate reagents)

IT 530-62-1, 1,1'-Carbonyldiimidazole 589-87-7, 1-Bromo-4-iodobenzene 644-97-3, Dichlorophenylphosphine 647-42-7, 3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluoro-1-octanol 1079-66-9 2043-53-0, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-Heptadecafluoro-10-iododecane 2043-57-4, 1,1,1,2,2,3,3,4,4,5,5,6,6,-Tridecafluoro-8-iodooctane 2644-70-4, Hydrazine monohydrochloride 38550-44-6, 2-Iodo-4,4,5,5,6,6,7,7,8,8,9,9,9-tridecafluorononan-1-ol
RL: RCT (Reactant); RACT (Reactant or reagent)
(reagent precursor; nucleophilic substitution of alcs. by Mitsunobu reaction using perfluoroalkyl-containing phosphine and azodicarboxylate reagents)

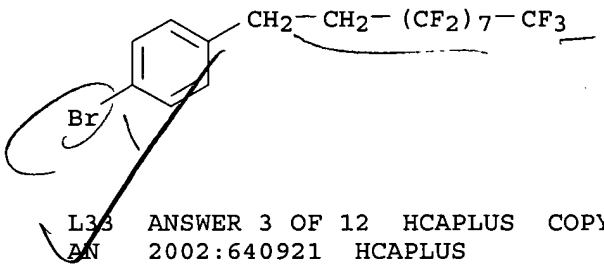
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

(1) Bhattacharyya, P; JOURNAL OF THE CHEMICAL SOCIETY, PERKIN TRANSACTIONS 1 1997, P3609 HCAPLUS
(2) Carey, F; Advanced Organic Chemistry - Part B 3rd Ed 1990, P126

IT **195324-88-0P**, 1-Bromo-4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)benzene
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(reagent intermediate; nucleophilic substitution of alcs. by Mitsunobu reaction using perfluoroalkyl-containing phosphine and azodicarboxylate reagents)

RN 195324-88-0 HCAPLUS

CN Benzene, 1-bromo-4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)- (9CI) (CA INDEX NAME)



L33 ANSWER 3 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:640921 HCAPLUS
DN 138:136691
ED Entered STN: 26 Aug 2002
TI Fluorous-tethered amine bases for organic and parallel synthesis: scope and limitations
AU Lindsley, Craig W.; Zhao, Zhijian; Leister, William H.; Strauss, Kimberly A.
CS Technology Enabled Synthesis Group, Department of Medicinal Chemistry, Merck Research Laboratories, West Point, PA, 19486, USA
SO Tetrahedron Letters (**2002**), 43(36), 6319-6323
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier Science Ltd.
DT Journal
LA English
CC 21-2 (General Organic Chemistry)
OS CASREACT 138:136691
AB The synthesis of fluorous-tethered amine bases is described. These novel fluorous-tethered reagents promote reactions, remove acidic byproducts, and scavenge electrophiles. They are readily separated from the reaction mixture by solid phase extraction on a novel mixed sorbent SPE (SCX/fluorous silica gel) delivering products in high yields and purities.
ST fluorous tethered amine reagent prepn
IT Amines, preparation
RL: PUR (Purification or recovery); RGT (Reagent); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(fluoro-containing; preparation of pure fluorous-tethered amine reagents for reaction promoters, acidic byproduct removal, and as electrophile scavengers)
IT Acylation catalysts
Scavengers
(preparation of pure fluorous-tethered amine reagents for reaction promoters, acidic byproduct removal, and as electrophile scavengers)
IT Reagents
RL: PUR (Purification or recovery); RGT (Reagent); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of pure fluorous-tethered amine reagents for reaction promoters, acidic byproduct removal, and as electrophile scavengers)
IT Electrophiles
(scavengers for; preparation of pure fluorous-tethered amine reagents for

reaction promoters, acidic byproduct removal, and as electrophile scavengers)

IT 3647-71-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation and sulfonylation of; preparation of pure fluorous-tethered amine reagents for reaction promoters, acidic byproduct removal, and as electrophile scavengers)

IT 51-45-6, 1H-Imidazole-4-ethanamine, reactions 104-78-9 121-05-1 123-00-2, 4-Morpholinepropanamine 4963-47-7 13258-63-4, 4-Pyridineethanamine
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation of; preparation of pure fluorous-tethered amine reagents for reaction promoters, acidic byproduct removal, and as electrophile scavengers)

IT 335-64-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation with; preparation of pure fluorous-tethered amine reagents for reaction promoters, acidic byproduct removal, and as electrophile scavengers)

IT 307-29-9
RL: MSC (Miscellaneous)
(preparation of pure fluorous-tethered amine reagents for reaction promoters, acidic byproduct removal, and as electrophile scavengers)

IT 494798-74-2P 494798-78-6P 494798-79-7P 494798-80-0P 494798-81-1P 494798-82-2P 494798-83-3P
RL: PUR (Purification or recovery); RGT (Reagent); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of pure fluorous-tethered amine reagents for reaction promoters, acidic byproduct removal, and as electrophile scavengers)

IT 3278-14-6P 87736-74-1P 470475-47-9P
RL: PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)
(preparation of pure fluorous-tethered amine reagents for reaction promoters, acidic byproduct removal, and as electrophile scavengers)

IT 98-88-4, Benzoyl chloride 1648-99-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of pure fluorous-tethered amine reagents for reaction promoters, acidic byproduct removal, and as electrophile scavengers)

IT 873-75-6, p-Bromobenzyl alcohol
RL: RCT (Reactant); RACT (Reactant or reagent)
(protection of; preparation of pure fluorous-tethered amine reagents for reaction promoters, acidic byproduct removal, and as electrophile scavengers)

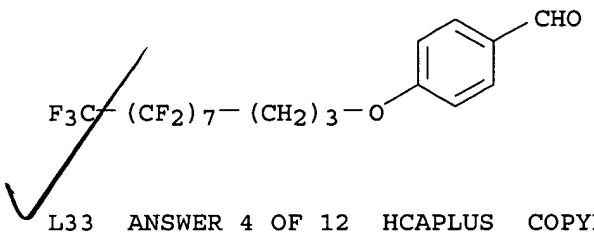
IT 64-04-0, Benzeneethanamine
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction with benzoyl chloride; preparation of pure fluorous-tethered amine reagents for reaction promoters, acidic byproduct removal, and as electrophile scavengers)

IT 110-91-8, Morpholine, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reductive amination of aldehyde with; preparation of pure fluorous-tethered amine reagents for reaction promoters, acidic byproduct removal, and as electrophile scavengers)

IT **494798-73-1**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reductive amination of; preparation of pure fluorous-tethered amine reagents for reaction promoters, acidic byproduct removal, and as electrophile scavengers)

IT 647-42-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(scavenger; preparation of pure fluorous-tethered amine reagents for reaction promoters, acidic byproduct removal, and as electrophile scavengers)

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Anon; www.fluorous.com
(2) Curran, D; Pure A Chem 2000, V72, P1649 HCAPLUS
(3) Curran, D; Pure A Chem 2000, V72, P1649 HCAPLUS
(4) Curran, D; Synlett 2001, P1488 HCAPLUS
(5) Curran, D; Synlett 2001, P1488 HCAPLUS
(6) Dandapani, S; Chemtracts 2001, V11, P635
(7) Lindsley, C; Tetrahedron Lett 2002, V43, P4225 HCAPLUS
(8) Lindsley, C; Tetrahedron Lett 2002, V43, P4467 HCAPLUS
(9) Lou, Z; J Org Chem 2001, V66, P4261
(10) Zhang, W; Tetrahedron 2002, V58, P3871 HCAPLUS
(11) Zhang, W; Tetrahedron 2002, V58, P3871 HCAPLUS
(12) Zhang, W; Tetrahedron 2002, V58, P3871 HCAPLUS
IT **494798-73-1**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reductive amination of; preparation of pure fluorous-tethered amine reagents for reaction promoters, acidic byproduct removal, and as electrophile scavengers)
RN 494798-73-1 HCAPLUS
CN Benzaldehyde, 4-[(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoroundecyl)oxy]- (9CI) (CA INDEX NAME)



L33 ANSWER 4 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:337996 HCAPLUS
DN 137:262818
ED Entered STN: 07 May 2002
TI Fluorous Mitsunobu reagents and reactions
AU Dandapani, Sivaraman; Curran, Dennis P.
CS Department of Chemistry, University of Pittsburgh, Pittsburgh, PA, 15260, USA
SO Tetrahedron (**2002**), 58(20), 3855-3864
CODEN: TETRAB; ISSN: 0040-4020
PB Elsevier Science Ltd.
DT Journal
LA English
CC 25-18 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
Section cross-reference(s): 23
OS CASREACT 137:262818
AB A fully fluorous Mitsunobu reaction procedure is introduced using fluorous triphenylphosphines [4-(C6F13CH2CH2)C6H4]2PPh (I) and 4-(C8F17CH2CH2)C6H4PPh2 (II) and a fluorous azodicarboxylate C6F13CH2CH2OC(:O)N:NCOOCH2CH2C6F13 (III). The modified Mitsunobu procedure is used for the preparation of amines, imides, and esters by Mitsunobu reactions of 3,5-dinitro- and 4-nitrobenzoic acids, 4-(4-nitrophenyl)butanoic acid, phthalimide, and N-(tert-butoxycarbonyl)-4-toluenesulfonamide with methanol, ethanol, allyl alc., and 4-fluorobenzyl alc. Et anti-2-methyl-3-hydroxybutanoate and cholestanol are also esterified with clean inversion using II and III as Mitsunobu reagents. The order of addition of the reagents affects the reaction yields significantly; addition of III to a solution of I in THF followed by addition of the alc. and addition of the desired nucleophile gave the highest yields for Mitsunobu reactions. The fluorous hydrazinecarboxylate and fluorous

triphenylphosphine oxide byproducts are removed from the reaction mixture by chromatog. on fluorous silica gel; III and I are then regenerated from the separated byproducts by oxidation with bromine and reduction with the complex of dimethylamine and alane, resp. This procedure allows the ready separation of the difficultly separated triphenylphosphine oxide and hydrazinecarboxylate byproducts from Mitsunobu reactions.

ST fluorous triphenylphosphine prepn reagent Mitsunobu reaction; fluorinated azodicarboxylate prepn reagent Mitsunobu reaction; amide prepn; ester prepn; Mitsunobu reaction alc arom acid phthalimide sulfonamide fluorous reagent; removal byproduct regeneration fluorous triphenylphosphine azodicarboxylate Mitsunobu reaction

IT Substitution reaction, nucleophilic
(Mitsunobu; preparation of fluorous triphenylphosphines and fluorous azodicarboxylates as readily separated and regenerated reagents for Mitsunobu reaction of alcs.)

IT Alcohols, reactions
Carboxylic acids, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of fluorous triphenylphosphines and fluorous azodicarboxylates as readily separated and regenerated reagents for Mitsunobu reaction of alcs.)

IT Esters, preparation
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of fluorous triphenylphosphines and fluorous azodicarboxylates as readily separated and regenerated reagents for Mitsunobu reaction of alcs.)

IT 375-01-9 80806-68-4 83310-97-8 148043-73-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of fluorous azodicarboxylates as readily separated and regenerated reagents for Mitsunobu nucleophilic substitution reactions of alcs.)

IT 452912-12-8P 462995-97-7P 462995-98-8P 462995-99-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of fluorous azodicarboxylates as readily separated and regenerated reagents for Mitsunobu nucleophilic substitution reactions of alcs.)

IT 452912-11-7P
RL: RGT (Reagent); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of fluorous azodicarboxylates as readily separated and regenerated reagents for Mitsunobu nucleophilic substitution reactions of alcs.)

IT 462996-00-5P 462996-01-6P 462996-02-7P 462996-03-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of fluorous azodicarboxylates as readily separated and regenerated reagents for Mitsunobu nucleophilic substitution reactions of alcs.)

IT 80-97-7, Cholestanol 85-41-6, Phthalimide 99-34-3, 3,5-Dinitrobenzoic acid 459-56-3, 4-Fluorobenzyl alcohol 647-42-7 5600-62-4, 4-(4-Nitrophenyl)butanoic acid 18303-04-3 51898-36-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of fluorous triphenylphosphines and fluorous azodicarboxylates as readily separated and regenerated reagents for Mitsunobu nucleophilic substitution reactions of alcs.)

IT 290827-94-0
RL: RGT (Reagent); RACT (Reactant or reagent)
(preparation of fluorous triphenylphosphines and fluorous azodicarboxylates as readily separated and regenerated reagents for Mitsunobu nucleophilic substitution reactions of alcs.)

IT 304-17-6P, N-Isopropylphthalimide 318-49-0P, N-(p-Fluorobenzyl)phthalimide 550-44-7P, N-Methylphthalimide 618-71-3P,

Ethyl 3,5-dinitrobenzoate 2702-58-1P, Methyl 3,5-dinitrobenzoate 5022-29-7P, N-Ethylphthalimide 5428-09-1P, N-Allylphthalimide 10477-99-3P, Isopropyl 3,5-dinitrobenzoate 20637-02-9P 54619-90-8P, Allyl 3,5-dinitrobenzoate 56805-36-8P 96946-70-2P 462996-05-0P 462996-06-1P 462996-07-2P 462996-08-3P 462996-09-4P 462996-10-7P 462996-11-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of fluorous triphenylphosphines and fluorous azodicarboxylates as readily separated and regenerated reagents for Mitsunobu nucleophilic substitution reactions of alcs.)

IT 1079-66-9, Chlorodiphenylphosphine **195324-88-0**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of fluorous triphenylphosphines as readily separated and regenerated reagents for Mitsunobu nucleophilic substitution reactions of alcs.)

IT 462996-04-9P
RL: RGT (Reagent); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of fluorous triphenylphosphines as readily separated and regenerated reagents for Mitsunobu nucleophilic substitution reactions of alcs.)

IT 290827-85-9P
RL: BYP (Byproduct); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(regeneration of a fluorous azodicarboxylate from a hydrazinecarboxylate byproduct of Mitsunobu nucleophilic substitution reactions of alcs. with a fluorous azodicarboxylate reagent)

RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD

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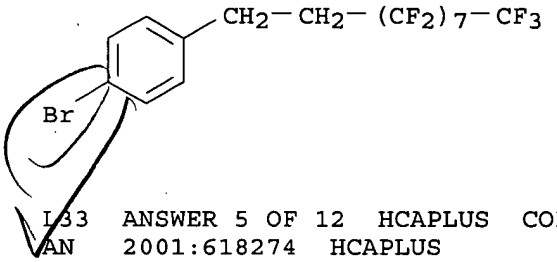
IT **195324-88-0**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of fluorous triphenylphosphines as readily separated and regenerated reagents for Mitsunobu nucleophilic substitution reactions of alcs.)

RN 195324-88-0 HCAPLUS
CN Benzene, 1-bromo-4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)- (9CI) (CA INDEX NAME)



L33 ANSWER 5 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:618274 HCAPLUS
DN 135:195695
ED Entered STN: 24 Aug 2001
TI Fluorous reaction and separation methods
IN Curran, Dennis P.; De Frutos Garcia, Oscar; Oderaotoshi, Yoji
PA University of Pittsburgh, USA
SO PCT Int. Appl., 77 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM G01N027-26
CC 31-5 (Alkaloids)
Section cross-reference(s): 21, 29

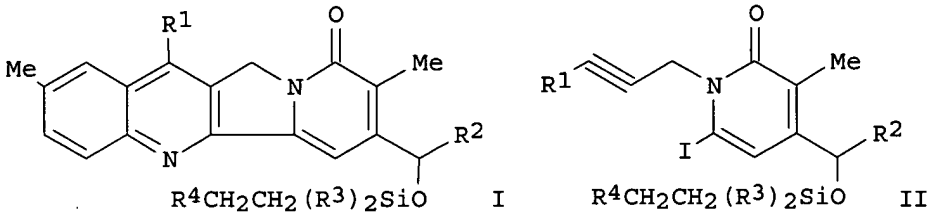
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001061332	A1	20010823	WO 2001-US5065	20010216 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6749756	B1	20040615	US 2000-506779	20000218 <--
CA 2400439	AA	20010823	CA 2001-2400439	20010216 <--
EP 1269170	A1	20030102	EP 2001-910849	20010216 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
JP 2003523350 T2 20030805 JP 2001-560670 20010216 <--
US 2004197829 A1 20041007 US 2004-831087 20040423 <--
PRAI US 2000-506779 A 20000218 <--
WO 2001-US5065 W 20010216 <--
CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
WO 2001061332	ICM	G01N027-26	
US 6749756	ECLA	G01N027/447B3A2	<--
US 2004197829	ECLA	G01N027/447B3A2	<--

GI



AB The present invention provides a fluorous-tagging strategy comprising the steps of: a. tagging a first organic compound with a first tagging moiety to result in a first tagged compound; b. tagging at least a second organic compound with a second tagging moiety different from the first tagging moiety to result in a second tagged compound; and c. separating the first tagged compound from a mixture including the second tagged compound using a separation technique based upon differences between the first tagging moiety and the second tagging moiety, in the synthesis and separation of mixts. of organic compds. including analogs of mappicine, such as, [I; R1 = H, aryl, SiMe2Bu-t; R2 = alkyl, CH2Ph; R3 = alkyl; R4 = alkyl, fluoroalkyl]. Thus, mappicine analogs, such as, I [R1 = H, Ph, SiMe2Bu-t; R2 = Et, Bu-t, CH2Ph; R3 = Me, (Me)2CH,; R4 = C6H13, C4F9, C6F13, C8F17, C10F21] were prepared via radical cyclization of N-alkylated pyridone [II; R1 = H, Ph, SiMe2Bu-t; R2 = Et, Bu-t, CH2Ph; R3 = Me, (Me)2CH,; R4 = C6H13, C4F9, C6F13, C8F17, C10F21] (also prepared) and 4-methylphenyl isonitrile and separated by preparative HPLC with a FluofixTM column.

ST fluorous tagging strategy org compd prepn mappicine sepn analog; cyclization radical prepn mappicine analog pyridone methylphenyl isonitrile

IT Combinatorial library
(fluorous mixture synthesis, a fluorous-tagging strategy for synthesis and separation of mixts. of organic compds.)

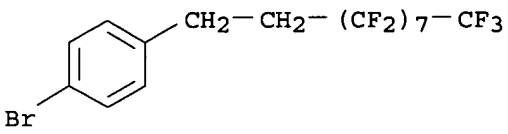
IT Alkaloids, preparation
RL: SPN (Synthetic preparation); PREP (Preparation)
(fluorous-tagging strategy for synthesis and separation of mixts. of mappicine analog)

IT Organic compounds, preparation
RL: PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)
(fluorous-tagging strategy for synthesis and separation of mixts. of organic compds.)

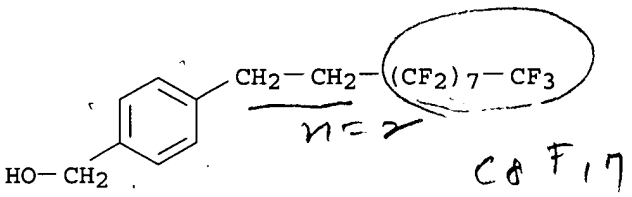
IT Silanes
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)
(haloalkyl; fluorous-tagging strategy for synthesis and separation of mixts. of organic compds.)
IT Preparative liquid chromatography
(high-performance; with Fluofix column for separation of mixts. of organic compds.)
IT Electrophoresis
Ion exclusion chromatography
(in separation of fluorous tagged products)
IT Reversed phase chromatography
(in separation of mixts. of organic compds.)
IT HPLC
(preparative; with Fluofix column for separation of mixts. of organic compds.)
IT Combinatorial chemistry
(use of fluorous-tagging strategy for synthesis and separation of mixts. of organic compds. in relation to)
IT 195324-87-9P **195324-88-0P** 305816-08-4P 356055-74-8P
356055-76-0P **356055-77-1P** 356055-78-2P 356055-79-3P
356055-83-9P 356055-85-1P 356055-86-2P 356055-87-3P 356056-17-2P
356056-18-3P 356056-19-4P 356056-20-7P 356056-21-8P 356056-44-5P
356056-45-6P
RL: PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(fluorous-tagging strategy for synthesis and separation of mixts. of organic compds.)
IT 54318-59-1DP, Mappicine, analogs 305816-04-0P 356055-80-6P
356055-81-7P 356055-82-8P 356055-84-0P 356055-88-4P 356055-89-5P
356055-90-8P 356055-91-9P 356055-92-0P 356055-93-1P 356055-94-2P
356055-95-3P 356055-96-4P 356055-97-5P 356055-98-6P 356055-99-7P
356056-00-3P 356056-01-4P 356056-02-5P 356056-03-6P 356056-04-7P
356056-05-8P 356056-06-9P 356056-07-0P 356056-08-1P 356056-09-2P
356056-22-9P 356056-23-0P 356056-24-1P 356056-25-2P 356056-26-3P
356056-27-4P 356056-28-5P 356056-29-6P 356056-30-9P 356056-31-0P
356056-32-1P 356056-33-2P 356056-34-3P 356056-35-4P 356056-36-5P
356056-37-6P 356056-38-7P 356056-39-8P 356056-40-1P 356056-41-2P
RL: PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)
(fluorous-tagging strategy for synthesis and separation of mixts. of organic compds.)
IT 91-60-1, 2-Naphthalenethiol 97-63-2, Ethyl methacrylate 106-93-4, 1,2-Dibromoethane 106-96-7, Propargyl bromide 108-98-5, Benzenethiol, reactions 589-87-7, 1-Bromo-4-iodobenzene 623-70-1, trans-Ethyl crotonate 696-63-9, 4-Methoxybenzenethiol 1493-13-6, Trifluoromethanesulfonic acid 1794-48-5 2043-53-0 2043-54-1
2043-55-2 2043-57-4 2227-29-4, Chlorodiisopropylsilane 2396-68-1, 4-tert-Butylbenzenethiol 7175-47-5, 4-Methylphenyl isonitrile 7790-99-0, Iodine chloride (ICl) 18162-84-0, Dimethyl octylsilyl chloride 27829-72-7, trans-Ethyl 2-hexenoate 131365-11-2 174092-75-2
340128-72-5 356056-42-3 356056-43-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(fluorous-tagging strategy for synthesis and separation of mixts. of organic compds.)
IT 305816-05-1P 305816-06-2P 305816-07-3P 305816-15-3P 305816-17-5P
305816-19-7P 305816-21-1P 305816-25-5P 305816-37-9P 356056-10-5P
356056-11-6P 356056-12-7P 356056-13-8P 356056-14-9P 356056-15-0P
356056-16-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(fluorous-tagging strategy for synthesis and separation of mixts. of organic compds.)
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

(1) Jackson; US 5340453 A 1994 HCAPLUS
(2) Wang; US 4454233 A 1984 HCAPLUS
IT **195324-88-0P 356055-77-1P**
RL: PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(fluorous-tagging strategy for synthesis and separation of mixts. of organic compds.)
RN 195324-88-0 HCAPLUS
CN Benzene, 1-bromo-4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)- (9CI) (CA INDEX NAME)



RN 356055-77-1 HCAPLUS
CN Benzenemethanol, 4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)- (9CI) (CA INDEX NAME)



L33 ANSWER 6 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:419502 HCAPLUS
DN 135:256798
ED Entered STN: 11 Jun 2001
TI Thiol additions to acrylates by fluorous mixture synthesis: relative control of elution order in demixing by the fluorous tag and the thiol substituent
AU Curran, D. P.; Oderaotoshi, Y.
CS Department of Chemistry, University of Pittsburgh, Pittsburgh, PA, 15260, USA
SO Tetrahedron (**2001**), 57(24), 5243-5253
CODEN: TETRAB; ISSN: 0040-4020
PB Elsevier Science Ltd.
DT Journal
LA English
CC 21-2 (General Organic Chemistry)
OS CASREACT 135:256798
AB All possible combinations of a series of three fluorous benzyl tags and three acrylates have been made. The resulting acrylate esters were combined in groups of three (one of each tag) and the resulting mixts. were reacted with a mixture of four thiols under standard conditions to effect conjugate addition Anal. of the resulting libraries by fluorous HPLC showed a primary separation based on the tag and revealed reliable secondary sepns. based on the thiol and the acrylate. The primary and secondary sepns. were used together in a preparative 'mixture of mixts.' experiment in which one of the tagged acrylate mixts. was reacted with a mixture of three thiols. The resulting nine component mixture was demixed by fluorous and reverse phase HPLC and then detagged to give all nine final products in pure form. Information on the effectiveness of fluorous tags in fluorous mixture synthesis was gained by reacting mixts. of tagged acrylates with mixts. of thiols followed by demixing.

ST thiol addn acrylate fluorous mixt
IT Addition reaction
(thiol addns. to acrylates by fluorous mixture synthesis)
IT Thiols (organic), reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(thiol addns. to acrylates by fluorous mixture synthesis)
IT 80-62-6 91-60-1, 2-Naphthalenethiol 108-98-5, Thiophenol, reactions
589-87-7, 1-Bromo-4-iodobenzene 623-70-1 696-63-9,
4-Methoxybenzenethiol 2396-68-1, 4-tert-Butylbenzenethiol 13894-63-8
356055-76-0 **356055-77-1** 356055-78-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(thiol addns. to acrylates by fluorous mixture synthesis)
IT 195324-87-9P **195324-88-0P** 356055-74-8P 356055-79-3P
356055-80-6P 356055-81-7P 356055-82-8P 356055-83-9P 356055-84-0P
356055-85-1P 356055-86-2P 356055-87-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(thiol addns. to acrylates by fluorous mixture synthesis)
IT 356055-88-4P 356055-89-5P 356055-90-8P 356055-91-9P 356055-92-0P
356055-93-1P 356055-94-2P 356055-95-3P 356055-96-4P 356055-97-5P
356055-98-6P 356055-99-7P 356056-00-3P 356056-01-4P 356056-02-5P
356056-03-6P 356056-04-7P 356056-05-8P 356056-06-9P 356056-07-0P
356056-08-1P 356056-09-2P 356056-27-4P 356056-28-5P 356056-29-6P
356056-30-9P 356056-31-0P 356056-32-1P 356056-33-2P 356056-34-3P
356056-35-4P 356056-36-5P 356056-37-6P 356056-38-7P 356056-39-8P
356056-40-1P 361448-65-9P 529484-63-7P 529484-65-9P 529484-70-6P
529484-71-7P 529484-72-8P 529484-73-9P 529484-74-0P 529484-79-5P
529484-80-8P 529484-81-9P 529484-82-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(thiol addns. to acrylates by fluorous mixture synthesis)
RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Berendsen, G; Anal Chem 1980, V52, P1990 HCAPLUS
(2) Berendsen, G; J Liquid Chromatogr 1978, V1, P403 HCAPLUS
(3) Billiet, H; J Chromat 1981, V218, P443 HCAPLUS
(4) Boger, D; J Am Chem Soc 1998, V120, P7220 HCAPLUS
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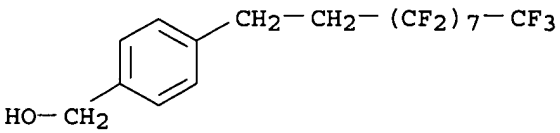
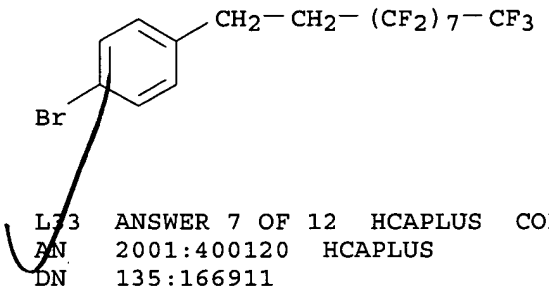
(15) Zhang, Q; J Org Chem 2000, V65, P8866 HCAPLUS
IT **356055-77-1**
RL: RCT (Reactant); RACT (Reactant or reagent)
(thiol addns. to acrylates by fluorous mixture synthesis)
RN 356055-77-1 HCAPLUS
CN Benzenemethanol, 4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)- (9CI) (CA INDEX NAME)



IT **195324-88-0P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(thiol addns. to acrylates by fluorous mixture synthesis)
RN 195324-88-0 HCAPLUS
CN Benzene, 1-bromo-4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)- (9CI) (CA INDEX NAME)



L23 ANSWER 7 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:400120 HCAPLUS
DN 135:166911
ED Entered STN: 05 Jun 2001
TI Synthesis, Reactivity, and Metal Complexes of Fluorous Triarylphosphines of the Formula P(p-C6H4(CH2)3(CF2)n-1CF3)3 (n = 6, 8, 10)
AU Soos, Tibor; Bennett, Byron L.; Rutherford, Drew; Barthel-Rosa, Luis P.; Gladysz, J. A.
CS Institut fuer Organische Chemie, Friedrich-Alexander Universitaet Erlangen-Nuernberg, Erlangen, 91054, Germany
SO Organometallics (**2001**), 20(14), 3079-3086
CODEN: ORGND7; ISSN: 0276-7333
PB American Chemical Society
DT Journal
LA English
CC 29-13 (Organometallic and Organometalloidal Compounds)
Section cross-reference(s): 24, 67
OS CASREACT 135:166911
AB Reactions of p-BrC6H4CH:O with Wittig reagents derived from [Ph3PCH2CH2Rfn]+I- (Rfn = (CF2)n-1CF3; n = 6 (6a), 8 (6b), 10 (6c)) give p-BrC6H4CH:CHCH2Rfn (86-93%), which are treated with H2 and Wilkinson's catalyst to yield p-BrC6H4(CH2)3Rfn (91-94%). Reactions with n-BuLi and PCl3 (0.33 equiv) give, after workup, mixts. of the title compds. (9a-c) and the corresponding phosphine oxides (10a-c). Treatment with H2O2 gives pure 10 (a/b/c 88/57/24%), which are reduced with Cl3SiH/Et3N to 9 (a/b/c 69/82/43%). Fluorous phase affinities increase with perfluoroalkyl chain length, as quantified by CF3C6F11/toluene partition coeffs. (9a, 19.5:80.5; 9b, 66.6:33.4). Reaction of 9b, [Ir(COD)(μ-Cl)]2, and CO gives trans-Ir(CO)(Cl)[P(p-C6H4(CH2)3Rf8)3]2 (76%). The IR νCO value is only slightly greater than that of Vaska's complex (1958 vs 1952 cm-1), indicating nearly negligible inductive effects of the perfluoroalkyl groups. Reaction of 9b and [Rh(COD)(μ-Cl)]2 yields Rh[P(p-C6H4(CH2)3Rf8)3]3(Cl) (82-93%), which gives small equilibrium amts. of [Rh[P(p-C6H4(CH2)3Rf8)3]2(μ-Cl)]2 and 9b in solution, and catalyzes the hydrogenation of alkenes under both biphasic (CF3C6F11/toluene) and monophasic (CF3C6H5) conditions.
ST fluorous triaryl phosphine prepn reaction rhodium iridium cyclooctadiene chloride; hydrogenation catalyst fluorous triarylphosphine rhodium complex
IT Hydrogenation catalysts
(preparation of fluorous triarylphosphine rhodium complex as hydrogenation catalyst for cyclohexenone)
IT 94190-73-5, Triphenyl(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)phosphonium iodide 94190-74-6, (3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-Heptadecafluorodecyl)triphenylphosphonium iodide 130567-58-7, (3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-Heneicosafluorododecyl)triphenylphosphonium iodide
RL: RCT (Reactant); RACT (Reactant or reagent)

(Wittig reaction with bromobenzaldehyde)
IT 1122-91-4, 4-Bromobenzaldehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(Wittig reaction with fluorous phosphonium salt)
IT 354137-11-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(equilibration of free phosphine, chloride bridged dimer and corresponding monomer)
IT 930-68-7, 2-Cyclohexen-1-one
RL: RCT (Reactant); RACT (Reactant or reagent)
(fluorous triarylphosphine rhodium catalyzed hydrogenation of)
IT 14694-95-2, Chlorotris(triphenylphosphine)rhodium
RL: CAT (Catalyst use); USES (Uses)
(hydrogenation of fluorous diarylalkenylphosphine catalyzed with)
IT 353525-51-6P **353525-52-7P** 353525-53-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and phosphination of)
IT 353525-57-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction with iridium or rhodium complexes)
IT 353525-54-9P 353525-55-0P 353525-60-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reduction of)
IT 353525-48-1P 353525-49-2P 353525-50-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and rhodium catalyzed hydrogenation of)
IT 354137-10-3P
RL: CAT (Catalyst use); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation as hydrogenation catalyst and equilibration with free phosphine and chloride bridged dimer)
IT 108-94-1P, Cyclohexanone, preparation 353525-56-1P 353525-58-3P 353525-59-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
IT 12092-47-6 12112-67-3, Bis[(μ-chloro)(1,5-cyclooctadiene)iridium]
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction with fluorous triarylphosphine)
RE.CNT 71 THERE ARE 71 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
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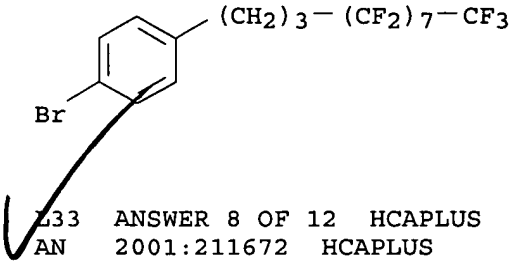
IT **353525-52-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and phosphination of)

RN 353525-52-7 HCAPLUS

CN Benzene, 1-bromo-4-(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoroundecyl)- (9CI) (CA INDEX NAME)



L33 ANSWER 8 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:211672 HCAPLUS
DN 134:366630
ED Entered STN: 25 Mar 2001
TI Efficient access to perfluoroalkylated aryl compounds by Heck reaction
AU Darses, Sylvain; Pucheault, Mathieu; Genet, Jean-Pierre
CS Laboratoire de Synthese Selective Organique (UMR 7573, CNRS), Ecole Nationale Superieure de Chimie de Paris, Paris, 75231, Fr.
SO European Journal of Organic Chemistry (**2001**), (6), 1121-1128
CODEN: EJOCFK; ISSN: 1434-193X
PB Wiley-VCH Verlag GmbH
DT Journal
LA English
CC 25-3 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
OS CASREACT 134:366630
AB Efficient introduction of perfluorinated tails onto aromatic rings has been achieved by Heck reaction between perfluoroalkenes and arenediazonium salts, catalyzed by palladium acetate. Subsequent transition metal catalyzed hydrogenation of the double bond afforded a large variety of aromatic compds. bearing an affinity for fluorous solvents. Formation of perfluoroalkylated phosphine ligands and their use in palladium-catalyzed coupling between potassium trifluoro(vinyl)borates and diazonium salts is also described, allowing an easy separation and recycling of the catalytic system.
ST perfluoroalkylated aryl compd prepn; Heck reaction hydrogenation perfluoroalkylated aryl compd prepn; coupling reaction perfluoroalkylated phosphine catalyst
IT Vinylation
(Heck; preparation of perfluoroalkylated aryl compds. by Heck reaction/hydrogenation)
IT Perfluorocarbons
RL: SPN (Synthetic preparation); PREP (Preparation)
(aryl; preparation of perfluoroalkylated aryl compds. by Heck reaction/hydrogenation)
IT Aromatic hydrocarbons, preparation
RL: SPN (Synthetic preparation); PREP (Preparation)
(perfluoro; preparation of perfluoroalkylated aryl compds. by Heck reaction/hydrogenation)
IT Hydrogenation
(preparation of perfluoroalkylated aryl compds. by Heck reaction/hydrogenation)
IT 325459-92-5P
RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(cross-coupling reaction of arenediazonium salts with organotrifluoroborates)
IT 13682-77-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(cross-coupling reaction of arenediazonium salts with organotrifluoroborates)
IT 2715-43-7P, Ethyl 4-vinylbenzoate
RL: SPN (Synthetic preparation); PREP (Preparation)
(cross-coupling reaction of arenediazonium salts with organotrifluoroborates)

IT 340158-00-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
IT 348-06-1 369-57-3, Benzenediazonium tetrafluoroborate 456-27-9
459-44-9, 4-Methylbenzenediazonium tetrafluoroborate 500-25-4
591-18-4, 3-Bromoiodobenzene 624-31-7, 4-Iodotoluene 673-40-5
1514-50-7, 4-Iodobenzenediazonium tetrafluoroborate 10448-07-4
21652-58-4 25291-17-2 28912-87-0 340157-80-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of perfluoroalkylated aryl compds. by Heck reaction/hydrogenation)
IT **195324-88-0P** 340157-81-5P 340157-82-6P 340157-83-7P
340157-84-8P 340157-85-9P 340157-86-0P 340157-88-2P 340157-89-3P
340157-90-6P 340157-91-7P **340157-99-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of perfluoroalkylated aryl compds. by Heck reaction/hydrogenation)
IT 106873-83-0P 195324-86-8P 195324-87-9P 340157-87-1P 340157-92-8P
340157-93-9P 340157-94-0P 340157-95-1P 340157-96-2P 340157-97-3P
340157-98-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of perfluoroalkylated aryl compds. by Heck reaction/hydrogenation)
RE.CNT 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
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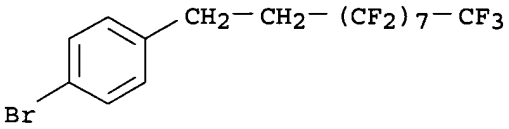
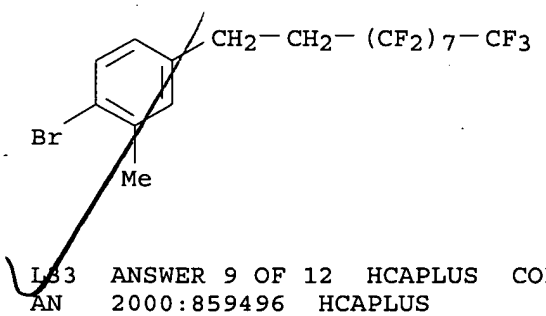
IT **195324-88-0P 340157-99-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of perfluoroalkylated aryl compds. by Heck reaction/hydrogenation)

RN 195324-88-0 HCAPLUS
CN Benzene, 1-bromo-4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)- (9CI) (CA INDEX NAME)



RN 340157-99-5 HCAPLUS
CN Benzene, 1-bromo-4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)-2-methyl- (9CI) (CA INDEX NAME)



L83 ANSWER 9 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:859496 HCAPLUS
DN 134:178294
ED Entered STN: 08 Dec 2000
TI Repetitive application of perfluoro-tagged Pd complexes for Stille couplings in a fluorous biphasic system

AU Schneider, Siegfried; Bannwarth, Willi
CS Universitat Freiburg Institut fur Chemie und Biochemie, Freiburg, 79104, Germany
SO Angewandte Chemie, International Edition (2000), 39(22), 4142-4145
CODEN: ACIEF5; ISSN: 1433-7851
PB Wiley-VCH Verlag GmbH
DT Journal
LA English
CC 25-1 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
OS CASREACT 134:178294
AB Three new perfluoro-tagged Pd complexes, prepared from (4-C8F17C6H4)3P, (3-C8F17C6H4)3P, or (4-C8F17CH2CH2)3P, and Na2[PdCl4], are suitable as catalysts in Stille couplings in a fluorous biphasic system. They can be recycled and reused after phase separation so that they can be applied up to six times without significant reduction in yield.
ST perfluoro palladium catalyst Stille coupling; fluorous biphasic system perfluoro palladium catalyst
IT Coupling reaction catalysts
(Stille; repetitive application of perfluoro-tagged Pd complexes for Stille couplings in a fluorous biphasic system)
IT Solvents
Stille coupling reaction
(repetitive application of perfluoro-tagged Pd complexes for Stille couplings in a fluorous biphasic system)
IT 540-80-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of)
IT 355-02-2, Perfluoromethylcyclohexane 13820-53-6 32875-78-8
RL: RGT (Reagent); RACT (Reactant or reagent)
(preparation of)
IT 326475-44-9P 326475-45-0P 326475-46-1P
RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(repetitive application of perfluoro-tagged Pd complexes for Stille couplings in a fluorous biphasic system)
IT 106-37-6, p-Dibromobenzene 507-63-1, Perfluorooctyl iodide 540-37-4, 4-Iodoaniline 580-13-2, 2-Bromonaphthalene 610-94-6, Methyl 2-bromobenzoate 619-42-1, Methyl 4-bromobenzoate 626-01-7, 3-Iodoaniline 2043-53-0 86487-17-4 118486-94-5, Tributyl-2-furyltin 122439-11-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(repetitive application of perfluoro-tagged Pd complexes for Stille couplings in a fluorous biphasic system)
IT **195324-88-0P** 206560-77-2P 284472-92-0P 325459-90-3P 325459-91-4P 325459-92-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(repetitive application of perfluoro-tagged Pd complexes for Stille couplings in a fluorous biphasic system)
IT 33104-31-3P 39732-01-9P 51792-33-7P 53355-25-2P 63506-58-1P 81443-43-8P 89901-00-8P 93321-12-1P 325459-93-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(repetitive application of perfluoro-tagged Pd complexes for Stille couplings in a fluorous biphasic system)
RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Betzemeier, B; Angew Chem 1997, V109, P2736
(2) Betzemeier, B; Angew Chem Int Ed Engl 1997, V36, P2623 HCAPLUS
(3) Betzemeier, B; Synlett 1999, P489 HCAPLUS
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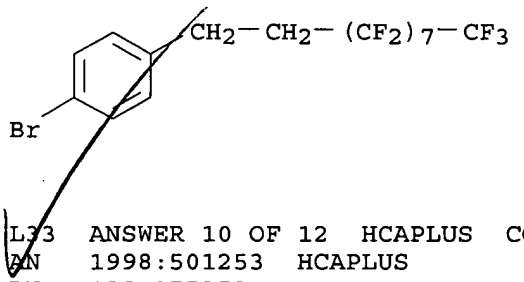
(37) Vincent, J; Angew Chem 1997, V109, P2438
(38) Vincent, J; Angew Chem Int Ed Engl 1997, V36, P2346 HCAPLUS
(39) Zhu, D; Synthesis 1993, P953 HCAPLUS

IT **195324-88-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(repetitive application of perfluoro-tagged Pd complexes for Stille couplings in a fluorous biphasic system)

RN 195324-88-0 HCAPLUS

CN Benzene, 1-bromo-4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)- (9CI) (CA INDEX NAME)



L33 ANSWER 10 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1998:501253 HCAPLUS
DN 129:175353
ED Entered STN: 12 Aug 1998
TI Using perfluoroalkyl-substituted phosphorus compounds as ligands for homogeneous catalysis in supercritical carbon dioxide
IN Leitner, Walter; Kainz, Sabine; Koch, Daniel; Wittmann, Klaus
PA Studiengesellschaft Kohle m.b.H., Germany
SO Ger. Offen., 14 pp.
CODEN: GWXXBX
DT Patent
LA German

IC ICM C07C045-50
ICS C07C047-02; C07C005-05; C07C011-10; C07B035-02; C07B041-06; B01J031-24
ICA C07F015-00; C07F009-6564; C07F009-50
CC 23-2 (Aliphatic Compounds)
Section cross-reference(s): 67
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	DE 19702025	A1	19980730	DE 1997-19702025	19970123	<--
	CA 2278572	AA	19980730	CA 1997-2278572	19971223	<--
	WO 9832533	A1	19980730	WO 1997-EP7266	19971223	<--
	W: CA, JP, US					
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
	EP 959987	A1	19991201	EP 1997-954464	19971223	<--
	EP 959987	B1	20010808			
	R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE, IE					
	AT 203934	E	20010815	AT 1997-954464	19971223	<--
	ES 2159158	T3	20010916	ES 1997-954464	19971223	<--
	JP 2001526582	T2	20011218	JP 1998-531520	19971223	<--
PRAI	DE 1997-19702025	A	19970123	<--		
	WO 1997-EP7266	W	19971223	<--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
DE 19702025	ICM	C07C045-50	
	ICS	C07C047-02; C07C005-05; C07C011-10; C07B035-02; C07B041-06; B01J031-24	
	ICA	C07F015-00; C07F009-6564; C07F009-50	
DE 19702025	ECLA	B01J031/24; C07C005/05+11/10; C07C045/50; C07F009/145+F; C07F009/50A6; C07F009/50A4+F	<--
WO 9832533	ECLA	B01J031/24; C07C005/05+11/10; C07C045/50; C07F009/145+F; C07F009/50A6; C07F009/50A4+F	<--

OS CASREACT 129:175353; MARPAT 129:175353
AB The solubility of P compds. such as those having aryl groups in supercrit. CO2 is improved by introduction of (CH2)x(CF2)yE groups (E = F or H, x = 0-4, y = 2-12) so that transition metal complexes of the resulting compds. are useful in the catalysis of selective hydrogenation of polyenes to olefins and hydroformylation of olefins in supercrit. CO2.
ST fluoroalkyl phosphorus compd complex catalyst; supercrit carbon dioxide polyene hydrogenation; transition metal complex catalyst polyene hydrogenation; olefin hydroformylation transition metal complex catalyst
IT Alkenes, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(hydroformylation; perfluoroalkyl-substituted phosphorus compds. as ligands for homogeneous catalysis of reaction of unsatd. compds. in supercrit. carbon dioxide)
IT Hydroformylation catalysts
(olefin; perfluoroalkyl-substituted phosphorus compds. as ligands for homogeneous catalysis of reaction of unsatd. compds. in supercrit. carbon dioxide)
IT Supercritical fluids
(perfluoroalkyl-substituted phosphorus compds. as ligands for homogeneous catalysis of reaction of unsatd. compds. in supercrit. carbon dioxide)
IT Transition metal complexes
RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
(perfluoroalkyl-substituted phosphorus compds. as ligands for homogeneous catalysis of reaction of unsatd. compds. in supercrit. carbon dioxide)
IT Hydrogenation catalysts
(polyene; perfluoroalkyl-substituted phosphorus compds. as ligands for

homogeneous catalysis of reaction of unsatd. compds. in supercrit. carbon dioxide)

IT Polyenes
RL: RCT (Reactant); RACT (Reactant or reagent)
(selective hydrogenation; perfluoroalkyl-substituted phosphorus compds. as ligands for homogeneous catalysis of reaction of unsatd. compds. in supercrit. carbon dioxide)

IT 12279-09-3 32610-47-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(catalyst precursor; perfluoroalkyl-substituted phosphorus compds. as ligands for homogeneous catalysis of reaction of unsatd. compds. in supercrit. carbon dioxide)

IT 111-66-0, 1-Octene
RL: RCT (Reactant); RACT (Reactant or reagent)
(hydroformylation; perfluoroalkyl-substituted phosphorus compds. as ligands for homogeneous catalysis of reaction of unsatd. compds. in supercrit. carbon dioxide)

IT 513-35-9P, 2-Methyl-2-butene 563-46-2P, 2-Methyl-1-butene
RL: IMF (Industrial manufacture); PREP (Preparation)
(isoprene hydrogenation product; perfluoroalkyl-substituted phosphorus compds. as ligands for homogeneous catalysis of reaction of unsatd. compds. in supercrit. carbon dioxide)

IT 195324-85-7P 195324-86-8P 195324-87-9P **195324-88-0P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(ligand precursor; perfluoroalkyl-substituted phosphorus compds. as ligands for homogeneous catalysis of reaction of unsatd. compds. in supercrit. carbon dioxide)

IT 106-37-6, 1,4-Dibromobenzene 108-36-1, 1,3-Dibromobenzene 109-72-8, Butyllithium, reactions 583-53-9, 1,2-Dibromobenzene 1069-08-5, Diethylaminodichlorophosphine 2043-53-0 2043-57-4, 1H,1H,2H,2H-Perfluorooctyl iodide 7439-95-4, Magnesium, reactions 7719-12-2, Phosphorus trichloride 28240-69-9, 1,2-Bis(dichlorophosphino)ethane
RL: RCT (Reactant); RACT (Reactant or reagent)
(ligand precursor; perfluoroalkyl-substituted phosphorus compds. as ligands for homogeneous catalysis of reaction of unsatd. compds. in supercrit. carbon dioxide)

IT 124-19-6P, Nonanal 7786-29-0P, 2-Nonanal
RL: IMF (Industrial manufacture); PREP (Preparation)
(octene hydroformylation product; perfluoroalkyl-substituted phosphorus compds. as ligands for homogeneous catalysis of reaction of unsatd. compds. in supercrit. carbon dioxide)

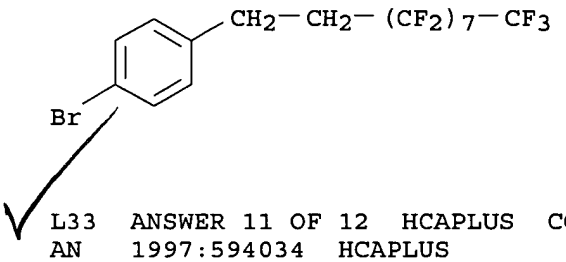
IT 195324-95-9P 195324-98-2P 195324-99-3P 195325-00-9P 195325-01-0P 195325-02-1P
RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
(perfluoroalkyl-substituted phosphorus compds. as ligands for homogeneous catalysis of reaction of unsatd. compds. in supercrit. carbon dioxide)

IT 195324-89-1P 195324-90-4P 195324-91-5P 195324-92-6P 195324-93-7P 195324-94-8P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(perfluoroalkyl-substituted phosphorus compds. as ligands for homogeneous catalysis of reaction of unsatd. compds. in supercrit. carbon dioxide)

IT 124-38-9, Carbon dioxide, uses
RL: NUU (Other use, unclassified); USES (Uses)
(perfluoroalkyl-substituted phosphorus compds. as ligands for homogeneous catalysis of reaction of unsatd. compds. in supercrit. carbon dioxide)

IT 78-79-5, Isoprene, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)
(selective hydrogenation; perfluoroalkyl-substituted phosphorus compds. as ligands for homogeneous catalysis of reaction of unsatd. compds. in supercrit. carbon dioxide)
RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Anon; EP 0038701 A2 HCAPLUS
(2) Anon; EP 0155551 A1 HCAPLUS
(3) Anon; JP 05331076 A HCAPLUS
(4) Anon; EP 0614870 A3 HCAPLUS
(5) Anon; EP 0646588 A1 HCAPLUS
(6) Anon; EP 0647647 A1 HCAPLUS
(7) Anon; EP 0684249 A1 HCAPLUS
(8) Anon; US 5171907 HCAPLUS
(9) Anon; US 5382729 HCAPLUS
(10) Anon; Patents Abstracts of Japan 1994, V18(163), PC-1181
IT **195324-88-0P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(ligand precursor; perfluoroalkyl-substituted phosphorus compds. as ligands for homogeneous catalysis of reaction of unsatd. compds. in supercrit. carbon dioxide)
RN 195324-88-0 HCAPLUS
CN Benzene, 1-bromo-4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)- (9CI) (CA INDEX NAME)



L33 ANSWER 11 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:594034 HCAPLUS
DN 127:242400
ED Entered STN: 17 Sep 1997
TI Perfluoroalkyl-substituted arylphosphines as ligands for homogeneous catalysis in supercritical carbon dioxide
AU Kainz, Sabine; Koch, Daniel; Baumann, Wolfgang; Leitner, Walter
CS Max-Planck-Institut fur Kohlenforschung, Mulheim an der Ruhr, D-45470, Germany
SO Angewandte Chemie, International Edition in English (**1997**), 36(15), 1628-1630
CODEN: ACIEAY; ISSN: 0570-0833
PB Wiley-VCH
DT Journal
LA English
CC 78-7 (Inorganic Chemicals and Reactions)
Section cross-reference(s): 29, 67
AB Perfluoroalkyl-substituted arylphosphine ligands [F(CF2)y(CH2)2-x-C6H4]2PCH2CH2P[C6H4-x-(CH2)2(CF2)yF]2 (3a, x = 2, yr = 6, 3b, x = 3, yr = 6; 3c, x = 4, yr = 6; 3d, x = 4, yr = 8), [F(CF2)6(CH2)2-3-C6H4]3P (4) and [F(CF2)6(CH2)2-4-C6H4]2PCl (5) were prepared Ruthenium and rhodium complexes of 3 and 4, trans-[RuCl2(3c)2], [RhCl(4)3] and [Rh(hfacac)(3)] (hfacac = hexafluoroacetylacetonate), were prepared and the solubility of [Rh(hfacac)(3)] in supercrit. carbon dioxide (scCO2) was quantified by UV-visible spectroscopy of saturated solns. Rhodium complexes of these perfluoroalkyl-substituted arylphosphine ligands exhibit enhanced solubility in scCO2 compared to their unsubstituted analogs and are thus more suitable for application in homogeneous catalysis. A catalyst formed in situ from

[Rh(hfacac)(η4-C8H12)] and 4 catalyzed the hydroformylation of 1-octene in scCO2 to the isomeric aldehydes nonanal and 2-methyloctanal with a 92% conversion and no side reactions.

ST rhodium perfluoroalkylarylphosphine complex prepn catalyst soly; arylphosphine perfluoroalkyl rhodium prepn catalyst soly; ruthenium perfluoroalkylarylphosphine complex prepn; phosphine perfluoroalkylaryl rhodium prepn catalyst soly; hydroformylation octene perfluoroalkylarylphosphine rhodium catalyst system; soly supercrit carbon dioxide rhodium perfluoroalkylarylphosphine

IT Hydroformylation catalysts
(octene hydroformylation in presence of perfluoroalkyl-substituted arylphosphine and rhodium cyclooctadiene hexafluoroacetylacetonato complex catalyst system in supercrit. carbon dioxide)

IT Solubility
(of rhodium perfluoroalkyl-substituted arylphosphine complexes in supercrit. carbon dioxide)

IT 32610-47-2, (η4-(1,5-Cyclooctadiene))(hexafluoroacetylacetonato)rhodium
RL: CAT (Catalyst use); USES (Uses)
(catalytic activity in hydroformylation of octene in supercrit. carbon dioxide)

IT 111-66-0, 1-Octene
RL: RCT (Reactant); RACT (Reactant or reagent)
(catalytic hydroformylation in supercrit. carbon dioxide by perfluoroalkyl-substituted arylphosphine and rhodium cyclooctadiene hexafluoroacetylacetonato complex catalyst system)

IT 1069-08-5, Dichloro(diethylamino)phosphine
RL: RCT (Reactant); RACT (Reactant or reagent)
(for preparation of perfluoroalkyl-substituted arylphosphine)

IT 195324-93-7P
RL: CAT (Catalyst use); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(for preparation of rhodium perfluoroalkyl-substituted arylphosphine complex and catalytic activity in hydroformylation of octene in supercrit. carbon dioxide)

IT 108-36-1, 1,3-Dibromobenzene 583-53-9, 1,2-Dibromobenzene 2043-53-0 7719-12-2, Phosphorus chloride (PCl3)
RL: RCT (Reactant); RACT (Reactant or reagent)
(for preparation of rhodium perfluoroalkyl-substituted arylphosphine complexes)

IT 195324-85-7P 195324-86-8P **195324-88-0P** 195324-89-1P 195324-90-4P 195324-92-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(for preparation of rhodium perfluoroalkyl-substituted arylphosphine complexes)

IT 106-37-6, 1,4-Dibromobenzene 2043-57-4 28240-69-9, 1,2-Bis(dichlorophosphino)ethane
RL: RCT (Reactant); RACT (Reactant or reagent)
(for preparation of ruthenium and rhodium perfluoroalkyl-substituted arylphosphine complexes)

IT 195324-87-9P 195324-91-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(for preparation of ruthenium and rhodium perfluoroalkyl-substituted arylphosphine complexes)

IT 124-38-9, Carbon dioxide, uses
RL: NUU (Other use, unclassified); USES (Uses)
(perfluoroalkyl-substituted arylphosphines as ligands for homogeneous catalysis in supercrit. carbon dioxide)

IT 195324-99-3P 195325-00-9P 195325-01-0P 195325-02-1P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and solubility in supercrit. carbon dioxide)

IT 124-19-6P, Nonanal 7786-29-0P, 2-Methyloctanal
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation from catalytic hydroformylation of octene in supercrit. carbon dioxide by perfluoroalkyl-substituted arylphosphine and rhodium cyclooctadiene hexafluoroacetylacetonato complex catalyst system)
IT 195324-94-8P 195324-95-9P 195324-98-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
IT 167028-38-8
RL: PRP (Properties)
(solubility in supercrit. carbon dioxide)
RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Angermund, K; Chem Eur J 1997, V3, P755 HCAPLUS
(2) Burk, M; J Am Chem Soc 1995, V117, P8277 HCAPLUS
(3) Cornils, B; DE 3415968 1984 HCAPLUS
(4) Dinjus, E; Chemistry under Extreme or Non-Classical Conditions 1996, P219
(5) Fornika, R; J Chem Soc Chem Commun 1995, P1479 HCAPLUS
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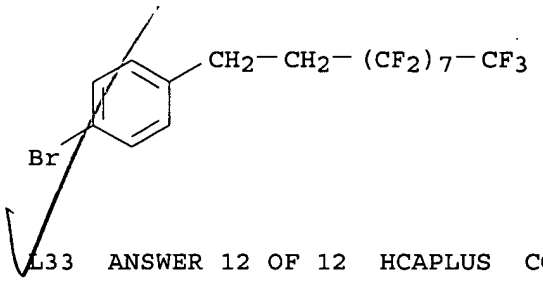
(17) Rathke, J; Organometallics 1991, V10, P1350 HCAPLUS
(18) Reetz, M; Chimia 1993, V47, P493 HCAPLUS
(19) Xiao, J; Tetrahedron Lett 1996, V37, P2813 HCAPLUS
(20) Zosel, K; Angew Chem 1978, V90, P748 HCAPLUS
(21) Zosel, K; Angew Chem Int Ed Engl 1978, V17, P702
IT **195324-88-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(for preparation of rhodium perfluoroalkyl-substituted arylphosphine complexes)
RN 195324-88-0 HCAPLUS
CN Benzene, 1-bromo-4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)- (9CI) (CA INDEX NAME)



L33 ANSWER 12 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1992:501039 HCAPLUS
DN 117:101039
ED Entered STN: 05 Sep 1992
TI Photoimaging compositions containing 2-diazo-1,2-quinone derivatives
IN Wakamatsu, Kan; Wakata, Yuichi; Satomura, Masato; Namiki, Tomizo
PA Fuji Photo Film Co., Ltd., Japan
SO Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DT Patent
LA English

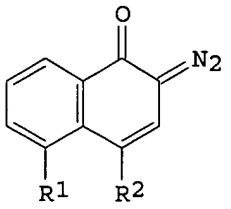
IC ICM C07C309-76
ICS C07C245-12; G03F007-004
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	EP 468531	A1	19920129	EP 1991-112624	19910726	<--
	EP 468531	B1	19941214			
	EP 468531	B2	19971112			
	R: DE, FR, GB, IT					
	JP 04089469	A2	19920323	JP 1990-400059	19901201	<--
	US 5312905	A	19940517	US 1991-736343	19910726	<--
	US 5384227	A	19950124	US 1993-93722	19930720	<--
	US 5514518	A	19960507	US 1994-315574	19940930	<--
PRAI	JP 1990-200989	A	19900727	<--		
	JP 1990-400059	A	19901201	<--		
	US 1991-736343	A3	19910726	<--		
	US 1993-93722	A3	19930720	<--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
EP 468531	ICM	C07C309-76	
	ICS	C07C245-12; G03F007-004	
EP 468531	ECLA	C07C309/71; C07C309/76; C07C309/77; C07C323/20; G03F007/022	<--
US 5384227	ECLA	C07C309/71; C07C309/76; C07C309/77; C07C323/20; G03F007/022	<--

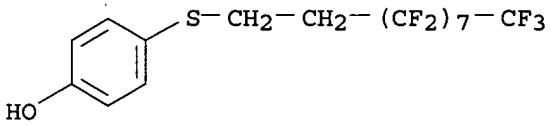
OS MARPAT 117:101039
GI



I

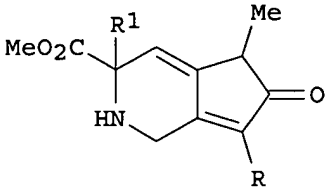
AB Photoimaging compns., which are suited for making color proofs, resist patterns, printing plates, and presensitized lithog. plates, comprises a 2-diazo-1,2-quinone derivative having the formula I (one of R1 and R2 is H and the other is a substituent group containing an alkyl group which is substituted by ≥1 F atom or the substituent group has the formula SO3R3 or SO2NR4R5 where R3 and ≥1 of R4 and R5 represent a substituent group containing an alkyl group having 2-20 C atoms and substituted by ≥3 F atoms) and a polymer having a softening temperature ≤60°.
ST photoimaging compn diazoquinone deriv resist; printing plate photosensitive compn diazoquinone; color proofing photosensitive compn diazoquinone
IT Photoimaging compositions and processes
(containing diazoquinone derivs. and polymers having low softening temperature)
IT Printing plates
(manufacture of, color proofing in, photosensitive compns. containing diazoquinone derivs. and polymers having low softening temperature for)
IT Polyamides, uses
RL: PREP (Preparation)
(photoimaging compns. containing diazoquinone derivs. and, for color

proofing and lithog. plate preparation)
IT Vinyl acetal polymers
RL: PREP (Preparation)
(butyrals, photoimaging compns. containing diazoquinone derivs. and, for color proofing and lithog. plate preparation)
IT Resists
(photo-, containing diazoquinone derivs. and polymers having low softening temperature)
IT Lithographic plates
(presensitized, containing diazoquinone derivs. and polymers having low softening temperature)
IT 100-42-5D, Styrene, copolymers with maleic acid semiesters 110-16-7D, Maleic acid, semiesters, copolymers with styrene
RL: USES (Uses)
(photoimaging compns. containing diazoquinone derivs. and, for color proofing and lithog. plate preparation)
IT 101320-96-1P **142623-70-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, in preparing diazoquinone derivs. for photoimaging compns.)
IT 142623-67-4P 142623-68-5P 142623-69-6DP, derivs. 142623-71-0P 142623-72-1P 142623-73-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and use of, as photosensitive compound in photoimaging compns.)
IT **142623-70-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, in preparing diazoquinone derivs. for photoimaging compns.)
RN 142623-70-9 HCAPLUS
CN Phenol, 4-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)thio]- (9CI) (CA INDEX NAME)

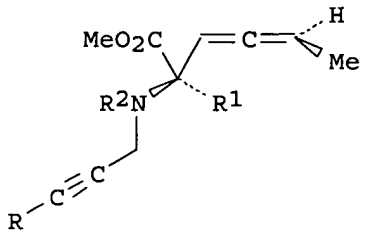


=> d l34 all hitstr tot

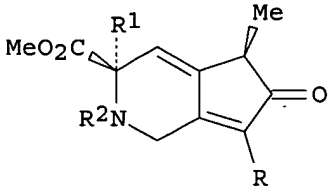
L34 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:991071 HCAPLUS
DN 142:134436
ED Entered STN: 19 Nov 2004
TI Fluorous Mixture Synthesis of 4-Alkylidene Cyclopentenones via a Rhodium-Catalyzed [2+2+1] Cycloaddition of Alkynyl Allenes
AU Manku, Sukhdev; Curran, Dennis P.
CS Department of Chemistry, University of Pittsburgh, Pittsburgh, PA, 15260, USA
SO Journal of Combinatorial Chemistry (2005), 7(1), 63-68
CODEN: JCCHFF; ISSN: 1520-4766
PB American Chemical Society
DT Journal
LA English
CC 27-18 (Heterocyclic Compounds (One Hetero Atom))
OS CASREACT 142:134436
GI



I



II



III

AB A combinatorial library of 16 oxodihydropyrindolecarboxylate hydrochlorides I•HCl (R = Me, Ph, BuCH2, Me2CHCH2; R1 = Me, EtCH2, Me2CHCH2, PhCH2) is prepared from amino acids and propargyl bromides using (fluoroalkylethyl)benzyl protecting groups to allow the reaction products to be separated readily by conventional silica gel chromatog. Protection of amino acids with the N-hydroxysuccinimidyl esters of 4-(2-fluoroalkylethyl)benzylcarbonic acids yields protected amino acids 4-R2NHCH(R1)CO2H [R1 = Me, PhCH2, EtCH2, Me2CHCH2; R2 = 4-R3CH2CH2C6H4CH2OCO; R3 = F3C(CF2)n, (F3C)2CF(CF2)6; n = 3, 5, 7] of which four are selected for use in the combinatorial library synthesis because of their separability. Esterification of the fluorous protected amino acids with 4-trimethylsilyl-3-butyn-2-ol yields individual fluorous protected amino acid propargyl esters. Claisen rearrangement of zinc enolates of the amino acid esters, methylation of the free acids, desilylation, and alkylation of the amino groups with propargyl bromides yields allenyl amino acids II [R = Me, Ph, BuCH2, Me2CHCH2; R1 = Me, EtCH2, Me2CHCH2, PhCH2; R2 = 4-R3CH2CH2C6H4CH2OCO; R3 = F3C(CF2)n, (F3C)2CF(CF2)6; n = 3, 5, 7] diastereoselectively as mixts. derived from a single propargyl bromide starting material. In the key step, Pauson-Khand cyclocarbonylation of mixts. of II in the presence of bis(chlorodicarbonylrhodium), triphenylphosphine, and silver tetrafluoroborate in dichloroethane at 40° yields oxodihydropyrindolecarboxylates III [R = Me, Ph, BuCH2, Me2CHCH2; R1 = Me, EtCH2, Me2CHCH2, PhCH2; R2 = 4-R3CH2CH2C6H4CH2OCO; R3 = F3C(CF2)n, (F3C)2CF(CF2)6; n = 3, 5, 7]. Cleavage of the fluorous benzylcarbamate protecting groups with di-Me sulfide and boron trifluoride etherate followed by treatment with hydrogen chloride in ether yields the title compds. I•HCl; the deprotection conditions erode the stereoselectivity of the overall reaction significantly, but other methods are not successful at removing the fluorous carbamate protecting groups.

ST alkylidene oxodihydropyrindolecarboxylate hydrochloride combinatorial library prepn; protected fluorous propargyl allenyl amino acid stereoselective prepn; fluorous benzylcarbamate protecting group sepn oxodihydropyrindolecarboxylate combinatorial library; stereoselective Pauson Khand reaction allenyl alkyne fluorous protecting group; combinatorial synthesis fluorous protecting group product sepn; rhodium catalyzed Pauson Khand cyclocarbonylation alkynyl allene

IT Combinatorial chemistry

Combinatorial library
Protective groups
(preparation of a combinatorial library of oxodihydropyrindolecarboxylates using fluorous protecting groups to facilitate separation with the rhodium-catalyzed Pauson-Khand reaction of alkynyl allenes as the key step)

IT Amino acids, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of a combinatorial library of oxodihydropyrindolecarboxylates using fluorous protecting groups to facilitate separation with the rhodium-catalyzed Pauson-Khand reaction of alkynyl allenes as the key step)

IT Pauson-Khand reaction
Pauson-Khand reaction catalysts
Stereoselective synthesis
(the use of a stereoselective rhodium-catalyzed Pauson-Khand reaction of alkynyl allenes as the key step in the preparation of a combinatorial library of oxodihydropyrindolecarboxylates using fluorous protecting groups)

IT 603-35-0, Triphenylphosphine, uses 14104-20-2, Silver tetrafluoroborate 14523-22-9, Bis(dicarbonylrhodium chloride)
RL: CAT (Catalyst use); USES (Uses)
(preparation of a combinatorial library of oxodihydropyrindolecarboxylates using fluorous protecting groups to facilitate separation with the rhodium-catalyzed Pauson-Khand reaction of alkynyl allenes as the key step)

IT 825636-09-7P 825636-10-0P 825636-11-1P 825636-12-2P 825636-13-3P
825636-14-4P 825636-15-5P 825636-16-6P 825636-17-7P 825636-18-8P
825636-19-9P 825636-20-2P 825636-21-3P 825636-22-4P 825636-23-5P
825636-24-6P
RL: CPN (Combinatorial preparation); CMBI (Combinatorial study); PREP (Preparation)
(preparation of a combinatorial library of oxodihydropyrindolecarboxylates using fluorous protecting groups to facilitate separation with the rhodium-catalyzed Pauson-Khand reaction of alkynyl allenes as the key step)

IT 825635-69-6P 825635-70-9P 825635-71-0P 825635-72-1P 825635-73-2P
825635-74-3P 825635-75-4P 825635-76-5P 825635-77-6P 825635-78-7P
825635-79-8P 825635-80-1P 825635-81-2P 825635-82-3P 825635-83-4P
825635-84-5P 825635-85-6P 825635-86-7P 825635-87-8P 825635-88-9P
825635-89-0P 825635-90-3P 825635-91-4P 825635-92-5P 825635-93-6P
825635-94-7P 825635-95-8P 825635-96-9P 825635-97-0P 825635-98-1P
825635-99-2P 825636-00-8P 825636-01-9P 825636-02-0P 825636-03-1P
825636-04-2P 825636-05-3P 825636-06-4P 825636-07-5P 825636-08-6P
RL: CPN (Combinatorial preparation); CRT (Combinatorial reactant); RCT (Reactant); CMBI (Combinatorial study); PREP (Preparation); RACT (Reactant or reagent)
(preparation of a combinatorial library of oxodihydropyrindolecarboxylates using fluorous protecting groups to facilitate separation with the rhodium-catalyzed Pauson-Khand reaction of alkynyl allenes as the key step)

IT 1794-48-5, 1-Bromo-3-phenyl-2-propyne 3355-28-0, 1-Bromo-2-butyne 18495-27-7, 1-Bromo-2-octyne 185030-28-8, 1-Bromo-4-methyl-2-pentyne
RL: CRT (Combinatorial reactant); RCT (Reactant); CMBI (Combinatorial study); RACT (Reactant or reagent)
(preparation of a combinatorial library of oxodihydropyrindolecarboxylates using fluorous protecting groups to facilitate separation with the rhodium-catalyzed Pauson-Khand reaction of alkynyl allenes as the key step)

IT 825635-61-8P 825635-64-1P 825635-65-2P 825635-68-5P
RL: CRT (Combinatorial reactant); RCT (Reactant); SPN (Synthetic preparation); CMBI (Combinatorial study); PREP (Preparation); RACT (Reactant or reagent)

(preparation of a combinatorial library of oxodihydropyrindolecarboxylates using fluorous protecting groups to facilitate separation with the rhodium-catalyzed Pauson-Khand reaction of alkynyl allenes as the key step)

IT 56-41-7, Alanine, reactions 61-90-5, Leucine, reactions 63-91-2, Phenylalanine, reactions 6600-40-4, Norvaline 6999-19-5, 4-(Trimethylsilyl)-3-butyn-2-ol 556050-48-7 **556050-49-8** 825635-46-9 825635-47-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of a combinatorial library of oxodihydropyrindolecarboxylates using fluorous protecting groups to facilitate separation with the rhodium-catalyzed Pauson-Khand reaction of alkynyl allenes as the key step)

IT 556050-59-0P 825635-48-1P 825635-51-6P 825635-53-8P 825635-54-9P 825635-56-1P 825635-57-2P 825635-60-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of a combinatorial library of oxodihydropyrindolecarboxylates using fluorous protecting groups to facilitate separation with the rhodium-catalyzed Pauson-Khand reaction of alkynyl allenes as the key step)

IT 556050-51-2P 556050-54-5P 825635-49-2P 825635-50-5P 825635-52-7P 825635-55-0P 825635-58-3P 825635-59-4P 825635-62-9P 825635-63-0P 825635-66-3P 825635-67-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of a combinatorial library of oxodihydropyrindolecarboxylates using fluorous protecting groups to facilitate separation with the rhodium-catalyzed Pauson-Khand reaction of alkynyl allenes as the key step)

RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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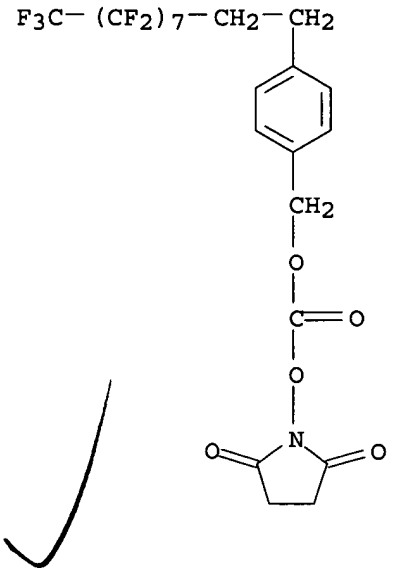
(19) Zhang, Q; J Am Chem Soc 2004, V126, P36 HCAPLUS
(20) Zhang, W; J Am Chem Soc 2002, V124, P10443 HCAPLUS

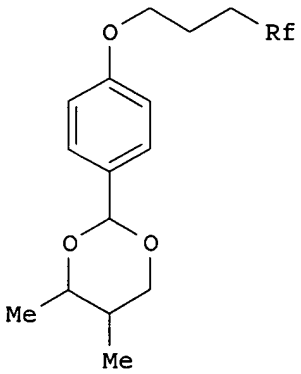
IT **556050-49-8**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of a combinatorial library of oxodihydropyrindolecarboxylates using fluorous protecting groups to facilitate separation with the rhodium-catalyzed Pauson-Khand reaction of alkynyl allenes as the key step)

RN 556050-49-8 HCAPLUS

CN 2,5-Pyrrolidinedione, 1-[[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methoxy]carbonyl]oxy]- (9CI) (CA INDEX NAME)



L34 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:713708 HCAPLUS
DN 141:366039
ED Entered STN: 01 Sep 2004
TI Stereoisomer libraries: Total synthesis of all 16 stereoisomers of the pine sawfly sex pheromone by a fluorous mixture-synthesis approach
AU Dandapani, Sivaraman; Jeske, Mario; Curran, Dennis P.
CS Department of Chemistry, University of Pittsburgh, Pittsburgh, PA, 15260, USA
SO Proceedings of the National Academy of Sciences of the United States of America (2004), 101(33), 12008-12012
CODEN: PNASA6; ISSN: 0027-8424
PB National Academy of Sciences
DT Journal
LA English
CC 26-2 (Biomolecules and Their Synthetic Analogs)
GI



I

AB All 16 stereoisomers of the sex pheromone of pine sawfly (3,7,11-trimethyltridecyl propanoate) have been synthesized on a 10- to 20-mg scale by a split-parallel fluorous mixture-synthesis approach. Thus, a mixture of (R,R)-, (S,S)-, (S,R)-, and (R,S)-MeCH(OH)CHMeCH2OH was added to Rf(CH2)3OC6H4CHO-4 (Rf = C4F9, C6F13, C8F17, C7F15) to give a mixture consisting of dioxanes I which were subsequently converted to the title

compds. Spectral data obtained for all 32 compds. (16 alcs. and the corresponding propionates) matched well with published data, thereby validating the fluorous-tag encoding of diastereoisomers. This fluorous-tag encoding method is recommended for the efficient synthesis of multiple stereoisomers for spectroscopic studies, biol. tests, or other structure-function relationships.

ST pine sawfly sex pheromone fluorous mixt synthesis; trimethyltridecyl propanoate stereoisomer synthesis; tridecyl propanoate stereoisomer pine sawfly sex pheromone synthesis

IT 79-03-8, Propionyl chloride 86-93-1, 1-Phenyl-1H-tetrazole-5-thiol 87678-97-5, (2R,3S)-2-Methylbutane-1,3-diol 90026-43-0, (2S,3R)-2-Methylbutane-1,3-diol 90026-54-3, (2R,3R)-2-Methylbutane-1,3-diol 116782-41-3, (2S,3S)-2-Methylbutane-1,3-diol 147915-55-7 **494798-73-1** 780772-19-2 780772-24-9 780772-25-0 780772-26-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(total synthesis of all 16 stereoisomers of pine sawfly sex pheromone 3,7,11-trimethyltridecyl propionate using fluorous mixture-synthesis)

IT 250229-72-2P 250229-78-8P 250229-80-2P 333718-17-5P 333718-18-6P 333718-19-7P 333718-20-0P 333718-21-1P 333718-22-2P 333718-23-3P 333718-24-4P 333718-25-5P 333718-26-6P 333718-27-7P 333718-28-8P 333718-29-9P 780772-17-0P 780772-18-1P 780772-20-5P 780772-21-6P 780772-22-7P 780772-23-8P 780772-27-2P 780772-28-3P 780772-29-4P 780772-30-7P 780772-31-8P 780772-32-9P 780772-33-0P 780772-34-1P 780772-35-2P 780772-36-3P 780772-37-4P 780772-38-5P 780772-39-6P 780772-40-9P 780772-41-0P 780772-42-1P 780772-43-2P 780772-44-3P 780772-45-4P 780772-46-5P 780772-47-6P 780772-48-7P 780772-49-8P 780772-50-1P 780772-51-2P 780772-52-3P 780772-53-4P 780772-54-5P 780772-55-6P 780772-56-7P 780772-57-8P 780772-58-9P 780772-59-0P 780772-60-3P 780772-61-4P 780772-62-5P 780772-63-6P 780772-64-7P 780772-65-8P 780772-66-9P 780772-67-0P 780772-68-1P 780772-69-2P 780772-70-5P 780772-71-6P 780772-72-7P 780772-73-8P 780772-74-9P 780772-75-0P 780772-76-1P 780772-77-2P 780772-78-3P 780772-79-4P 780772-80-7P 780772-81-8P 780772-82-9P 780772-83-0P 780772-84-1P 780772-85-2P 780772-86-3P 780772-87-4P 780772-88-5P 780772-89-6P 780772-90-9P 780772-91-0P 780772-92-1P 780772-93-2P 780772-94-3P 780772-95-4P 780772-96-5P 780772-97-6P 780772-98-7P 780772-99-8P 780773-00-4P 780773-01-5P 780773-02-6P 780773-03-7P 780773-04-8P 780773-05-9P 780773-06-0P 780773-07-1P 780773-08-2P 780773-09-3P 780773-10-6P 780773-11-7P 780773-12-8P 780773-13-9P 780773-14-0P 780773-15-1P 780773-16-2P 780773-17-3P 780773-18-4P 780773-19-5P 780773-20-8P 780773-21-9P 780773-22-0P 780773-23-1P 780773-24-2P 780773-25-3P 780773-26-4P 780773-27-5P 780773-28-6P 780773-29-7P 780773-39-9P 780773-41-3P 780773-43-5P 780773-45-7P 780773-47-9P 780773-49-1P 780773-51-5P 780773-52-6P 780773-90-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(total synthesis of all 16 stereoisomers of pine sawfly sex pheromone 3,7,11-trimethyltridecyl propionate using fluorous mixture-synthesis)

IT 250229-58-4P 250229-59-5P 333718-32-4P 333718-33-5P 333718-34-6P 333718-35-7P 333718-36-8P 333718-37-9P 333718-38-0P 333718-39-1P 333718-40-4P 333718-41-5P 333718-42-6P 333718-43-7P 333718-44-8P 333718-45-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(total synthesis of all 16 stereoisomers of pine sawfly sex pheromone 3,7,11-trimethyltridecyl propionate using fluorous mixture-synthesis)

RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD

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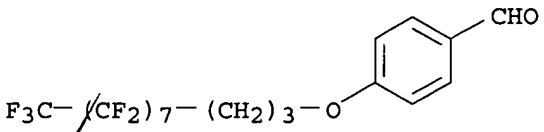
IT **494798-73-1**
RL: RCT (Reactant); RACT (Reactant or reagent)
(total synthesis of all 16 stereoisomers of pine sawfly sex pheromone 3,7,11-trimethyltridecyl propionate using fluorous mixture-synthesis)

RN 494798-73-1 HCAPLUS

CN Benzaldehyde, 4-[(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoroundecyl)oxy]- (9CI) (CA INDEX NAME)



L34 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:683729 HCAPLUS
DN 141:405395
ED Entered STN: 23 Aug 2004
TI New fluorous reversed phase silica gels for HPLC separations of perfluorinated compounds
AU Glatz, H.; Blay, C.; Engelhardt, H.; Bannwarth, W.
CS Institut fuer Organische Chemie und Biochemie, Universitaet Freiburg, Freiburg, 79100, Germany
SO Chromatographia (2004), 59(9/10), 567-570
CODEN: CHRGB7; ISSN: 0009-5893
PB Vieweg Verlag/GWV Fachverlage GmbH
DT Journal
LA English
CC 80-4 (Organic Analytical Chemistry)
AB Two new perfluoroalkyl-modified stationary phases were prepared and compared with two com. available perfluorinated stationary phases (Fluophase RP and Fluophase Pentafluorophenyl) and a C18-RP column with respect to retention times of an array of perfluoroalkyl-tagged and untagged mols. A few highly lipophilic compds. were also included. They showed high retention times on C18-RP columns, but not on perfluorinated support materials. Perfluoroalkyl-tagged compds. revealed a weak interaction with the pentafluorophenyl-modified support. The interaction between perfluoroalkyl-tagged compds. and perfluoroalkyl-modified stationary phases was strong, and dependent on the chain length of the perfluoro tags. Surprisingly, there was only a small difference between the retention times of perfluorinated compds. on C18-RP and C6F13-modified support. Fluorous-fluorous interactions became prevalent only with C8F17-tagged compds. on C8F17 functionalized silica gel. Compds. with two perfluoro tags showed a drastic increase in retention time, which might be due to a cooperative effect. These results demonstrate the uniqueness of

fluorous-fluorous interactions based on linear perfluoroalkyl chains and open up possibilities for the design of new perfluoro tags for purifications and noncovalent attachments of catalysts or biomols. on perfluorinated solid supports.

ST fluorous reversed phase silica gel HPLC perfluorinated compd sepn

IT HPLC stationary phases
(new fluorous reversed phase silica gels for HPLC sepns. of perfluorinated compds.)

IT Perfluoro compounds
RL: ANT (Analyte); ANST (Analytical study)
(new fluorous reversed phase silica gels for HPLC sepns. of perfluorinated compds.)

IT Silica gel, analysis
RL: ARU (Analytical role, unclassified); NUU (Other use, unclassified); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)
(reaction products, perfluorooctylsilylated or perfluorodecylsilylated; new fluorous reversed phase silica gels for HPLC sepns. of perfluorinated compds.)

IT 50-89-5, Thymidine, analysis 604-32-0, Cholesteryl benzoate 11104-38-4, Vitamin K1 149068-56-4 157829-77-1 163931-45-1 195324-86-8 195324-87-9 **195324-88-0** 206560-77-2 325459-90-3 340157-97-3 785806-72-6 785806-73-7 785806-74-8 785806-75-9 785806-76-0 785806-77-1
RL: ANT (Analyte); ANST (Analytical study)
(analyte; new fluorous reversed phase silica gels for HPLC sepns. of perfluorinated compds.)

IT 51851-37-7DP, 1H,1H,2H,2H-Perfluorooctyltriethoxysilane, reaction product with silica gel 101947-16-4DP, 1H,1H,2H,2H-Perfluorodecyltriethoxysilane, reaction product with silica gel
RL: ARU (Analytical role, unclassified); NUU (Other use, unclassified); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)
(new fluorous reversed phase silica gels for HPLC sepns. of perfluorinated compds.)

IT 394246-48-1, Fluophase RP 541515-84-8, Fluophase PFP
RL: ARU (Analytical role, unclassified); NUU (Other use, unclassified); ANST (Analytical study); USES (Uses)
(stationary phase for comparison; new fluorous reversed phase silica gels for HPLC sepns. of perfluorinated compds.)

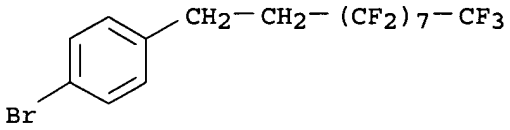
RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Barthelemy, S; Tetrahedron Lett 2002, V43, P807 HCAPLUS
(2) Berendsen, G; Anal Chem 1980, V52, P1990 HCAPLUS
(3) Berendsen, G; J Liq Chromatogr 1978, V1, P403 HCAPLUS
(4) Billiet, H; J Chromatogr 1981, V218, P261
(5) de Miguel, I; Chromatographia 1987, V24, P849 HCAPLUS
(6) De Miguel, I; J Chromatogr A 1999, V840, P31 HCAPLUS
(7) Dolfinger, R; Anal Chem 2003, V75, P1355 HCAPLUS
(8) Endres, A; Chem unserer Zeit 2000, V34, P382 HCAPLUS
(9) Engelhardt, H; J Liq Chromatogr 1987, V10, P1999 HCAPLUS
(10) Euerby, M; J Sep Sci 2003, V26, P295 HCAPLUS
(11) Horvath, I; Science 1994, V266, P72 HCAPLUS
(12) Kainz, S; Synthesis 1998, P1425 HCAPLUS
(13) Monde, T; J Chromatogr A 1996, V722, P273 HCAPLUS
(14) Sadek, P; J Chromatogr 1984, V288, P25 HCAPLUS
(15) Schneider, S; Angew Chem Int Ed 2000, V39, P4142 HCAPLUS
(16) Schwinn, D; Helv Chim Acta 2003, V86, P188 HCAPLUS
(17) Studer, A; Science 1997, V275, P823 HCAPLUS
(18) Tzschucke, C; Angew Chem 2002, V114, P4678

IT **195324-88-0**
RL: ANT (Analyte); ANST (Analytical study)
(analyte; new fluorous reversed phase silica gels for HPLC sepns. of

perfluorinated compds.)
RN 195324-88-0 HCAPLUS
CN Benzene, 1-bromo-4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)- (9CI) (CA INDEX NAME)



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FILE 'REGISTRY' ENTERED AT 07:56:30 ON 12 APR 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 11 APR 2005 HIGHEST RN 848290-51-7
DICTIONARY FILE UPDATES: 11 APR 2005 HIGHEST RN 848290-51-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

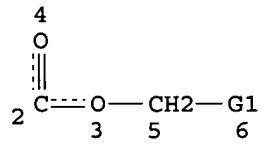
Please note that search-term pricing does apply when conducting SmartSELECT searches.

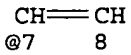
****
* *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
* *
****

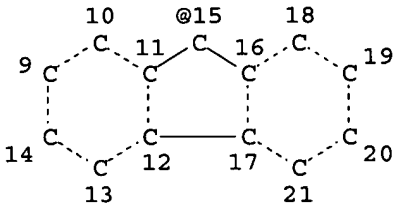
Crossover limits have been increased. See HELP CROSSOVER for details.

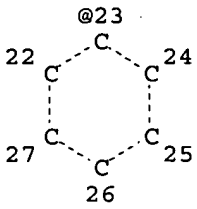
Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=> d sta que l60
L35 STR









VAR G1=7/15/23
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC 9 22
NUMBER OF NODES IS 26

STEREO ATTRIBUTES: NONE
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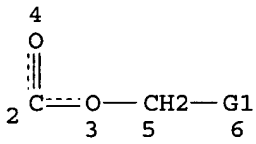
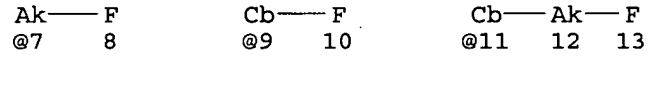
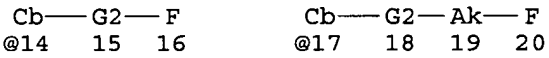
L38 35612 SEA FILE=REGISTRY SSS FUL L35 AND L36
L39 STR







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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 19

STEREO ATTRIBUTES: NONE
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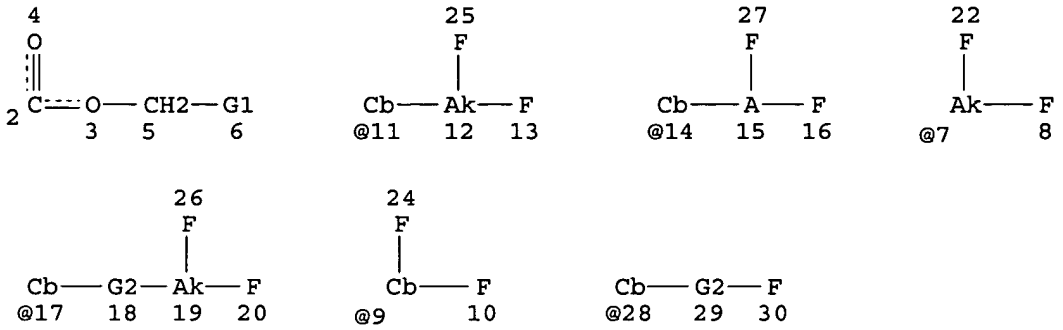
L42 STR



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DEFAULT ECLEVEL IS LIMITED

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RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 27

STEREO ATTRIBUTES: NONE
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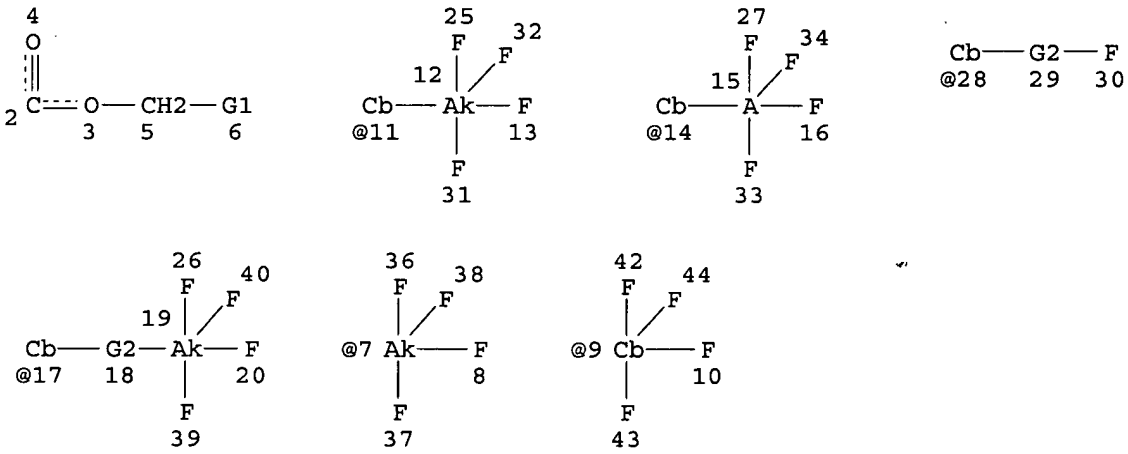
L45 STR



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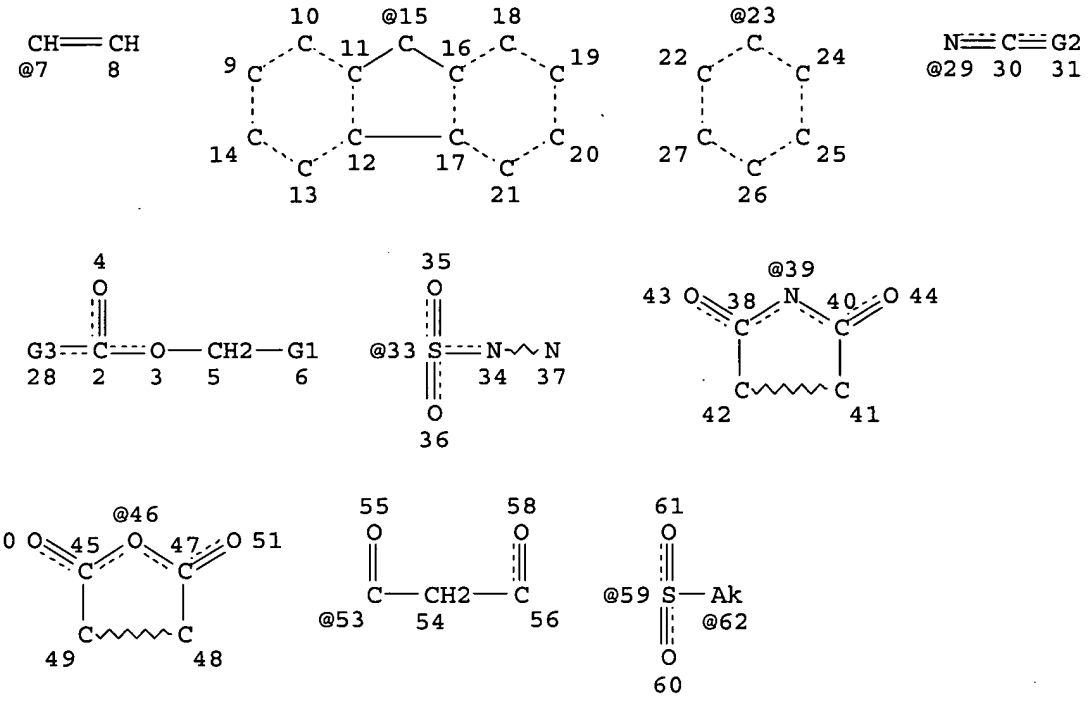
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 37

STEREO ATTRIBUTES: NONE
L47 3542 SEA FILE=REGISTRY SUB=L44 SSS FUL L45
L48 3179 SEA FILE=REGISTRY ABB=ON PLU=ON L47 NOT (PMS OR MXS)/CI
L49 72 SEA FILE=REGISTRY ABB=ON PLU=ON L48 AND NC4/ES
L50 6 SEA FILE=REGISTRY ABB=ON PLU=ON L49 AND (C18H14F9NO5 OR C20H14F13NO5 OR C23H14F19NO5 OR C22H14F17NO5 OR C29H18F17NO5 OR C13H10F3NO5)

L54 STR



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GRAPH ATTRIBUTES:
RSPEC 9 22 38 45
NUMBER OF NODES IS 58

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L58 23 SEA FILE=REGISTRY ABB=ON PLU=ON L57 AND L41
L59 3 SEA FILE=REGISTRY ABB=ON PLU=ON L58 AND (C19H12CLF17O2 OR C18H8CLF17O2 OR C18H10CLF17O2)
L60 9 SEA FILE=REGISTRY ABB=ON PLU=ON (L50 OR L59)

=> d his l60-

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SAV TEMP L60 SHIAO617A5/A
L61 7 S L60 NOT L26

FILE 'HCAOLD' ENTERED AT 07:55:25 ON 12 APR 2005
L62 0 S L61

FILE 'HCAPLUS' ENTERED AT 07:55:28 ON 12 APR 2005
L63 6 S L61
L64 1 S L63 AND L1-L12
L65 4 S L63 AND (PD<=20020711 OR PRD<=20020711 OR AD<=20020711)
L66 5 S L64,L65
L67 1 S L63 NOT L66

FILE 'REGISTRY' ENTERED AT 07:56:30 ON 12 APR 2005

=> d ide can tot l60

L60 ANSWER 1 OF 9 REGISTRY COPYRIGHT 2005 ACS on STN
RN 825635-47-0 REGISTRY
ED Entered STN: 04 Feb 2005
CN 2,5-Pyrrolidinedione, 1-[[[[4-[3,3,4,4,5,5,6,6,7,7,8,8,9,10,10,10-hexadecafluoro-9-(trifluoromethyl)decyl]phenyl]methoxy]carbonyl]oxy]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
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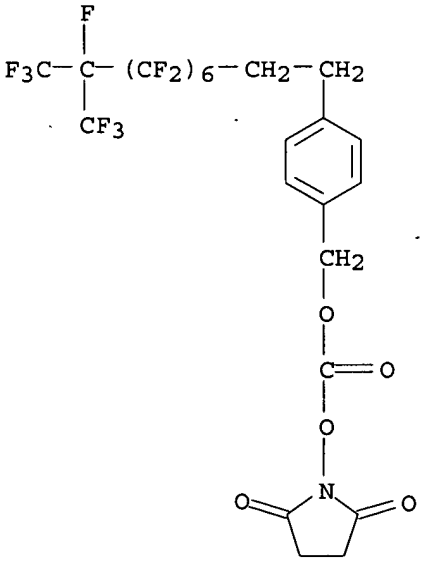
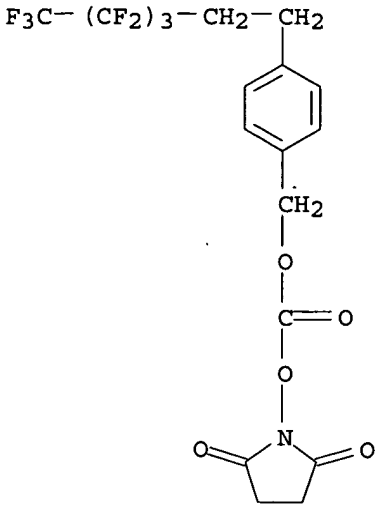
SR CA
LC STN Files: CA, CAPLUS, CASREACT



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 142:134436

L60 ANSWER 2 OF 9 REGISTRY COPYRIGHT 2005 ACS on STN
RN 825635-46-9 REGISTRY
ED Entered STN: 04 Feb 2005
CN 2,5-Pyrrolidinedione, 1-[[[[4-(3,3,4,4,5,5,6,6,6-nonafluorohexyl)phenyl]methoxy]carbonyl]oxy]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF **C18 H14 F9 N O5**
SR CA
LC STN Files: CA, CAPLUS, CASREACT



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 142:134436

L60 ANSWER 3 OF 9 REGISTRY COPYRIGHT 2005 ACS on STN
RN 649561-59-1 REGISTRY
ED Entered STN: 12 Feb 2004
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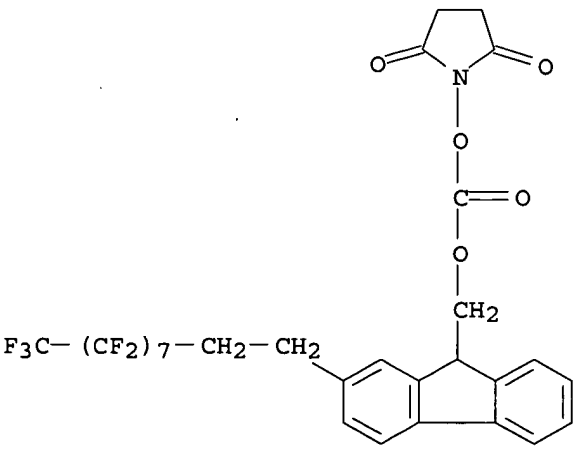
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



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REFERENCE 1: 140:128148

L60 ANSWER 4 OF 9 REGISTRY COPYRIGHT 2005 ACS on STN
RN 556050-49-8 REGISTRY
ED Entered STN: 28 Jul 2003
CN 2,5-Pyrrolidinedione, 1-[[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methoxy]carbonyl]oxy]- (9CI) (CA INDEX NAME)
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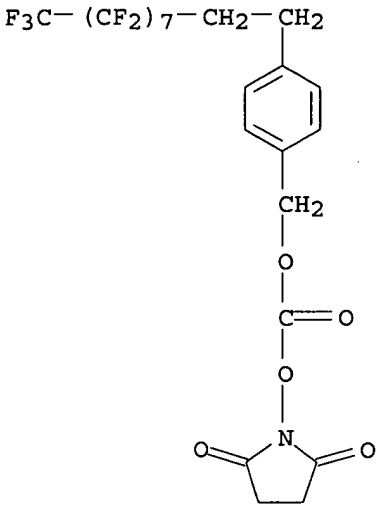
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL



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REFERENCE 1: 142:134436

REFERENCE 2: 140:128148

REFERENCE 3: 139:85611

L60 ANSWER 5 OF 9 REGISTRY COPYRIGHT 2005 ACS on STN
RN 556050-48-7 REGISTRY
ED Entered STN: 28 Jul 2003
CN 2,5-Pyrrolidinedione, 1-[[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)phenyl]methoxy]carbonyl]oxy]- (9CI) (CA INDEX NAME)
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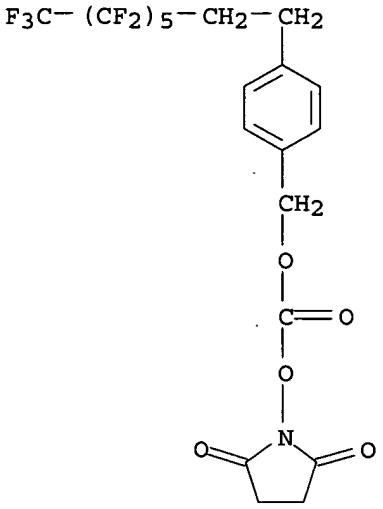
SR CA
LC STN Files: CA, CAPLUS, CASREACT



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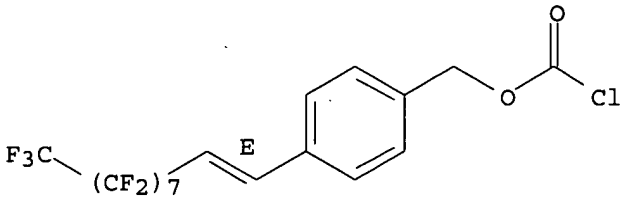
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 142:134436

REFERENCE 2: 139:85611

L60 ANSWER 6 OF 9 REGISTRY COPYRIGHT 2005 ACS on STN
RN 495388-43-7 REGISTRY
ED Entered STN: 27 Feb 2003
CN Carbonochloridic acid, [4-[(1E)-3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-1-decenyl]phenyl]methyl ester (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF **C18 H8 Cl F17 O2**
SR CA
LC STN Files: CA, CAPLUS, CASREACT

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:153811

L60 ANSWER 7 OF 9 REGISTRY COPYRIGHT 2005 ACS on STN
RN 495388-42-6 REGISTRY
ED Entered STN: 27 Feb 2003

CN Carbonochloridic acid, [4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)-2-methylphenyl]methyl ester (9CI) (CA INDEX NAME)
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MF **C19 H12 Cl F17 O2**
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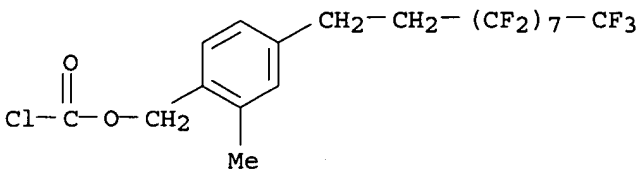
LC STN Files: CA, CAPLUS, CASREACT



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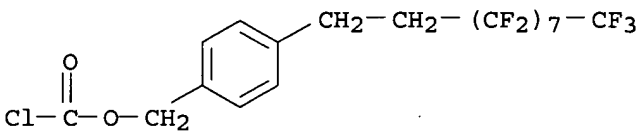
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:153811

L60 ANSWER 8 OF 9 REGISTRY COPYRIGHT 2005 ACS on STN
RN 495388-41-5 REGISTRY
ED Entered STN: 27 Feb 2003
CN Carbonochloridic acid, [4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF **C18 H10 Cl F17 O2**
SR CA
LC STN Files: CA, CAPLUS, CASREACT



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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:153811

L60 ANSWER 9 OF 9 REGISTRY COPYRIGHT 2005 ACS on STN
RN 332378-22-0 REGISTRY
ED Entered STN: 25 Apr 2001
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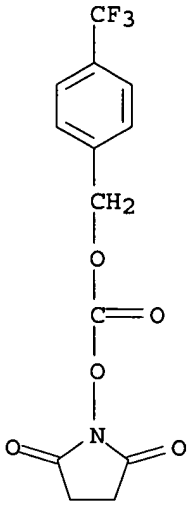
MF **C13 H10 F3 N O5**
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:221357

REFERENCE 2: 138:187521

REFERENCE 3: 134:280606

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USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 12 Apr 2005 VOL 142 ISS 16
FILE LAST UPDATED: 11 Apr 2005 (20050411/ED)

This file contains CAS Registry Numbers for easy and accurate
substance identification.

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L66 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:381316 HCAPLUS
DN 139:85611

ED Entered STN: 20 May 2003
TI Synthesis and Reactions of Fluorous Carbobenzyloxy (FCbz) Derivatives of α-Amino Acids
AU Curran, Dennis P.; Amatore, Muriel; Guthrie, David; Campbell, Matthew; Go, Eisan; **Luo, Zhiyong**
CS Department of Chemistry, University of Pittsburgh, Pittsburgh, PA, 15260, USA
SO Journal of Organic Chemistry (2003), 68(12), 4643-4647
CODEN: JOCEAH; ISSN: 0022-3263
PB American Chemical Society
DT Journal
LA English
CC 34-2 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 6
OS CASREACT 139:85611
AB Fluorous carbobenzyloxy (FCbz) reagents Rf(CH2)2-4-C6H4CH2OC(O)OSu (where Su is succinimidoyl and Rf is C6F13 and C8F17) have been used to make FCbz derivs. of 18 of the 20 natural amino acids. The potential utility of this new family of reagents in both standard fluorous synthesis with spe separation
and fluorous quasiracemic synthesis is illustrated with representative reactions of the FCbz-Phe derivs.
ST fluorous carbobenzyloxy prepn amino acid protecting group purifn safety; reagent fluorous carbobenzyloxy prepn amino acid protecting group purifn
IT Protective groups
Purification
Safety
(preparation and use of fluorous carbobenzyloxy reagents for use in amino acid chemical)
IT Amino acids, preparation
Reagents
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and use of fluorous carbobenzyloxy reagents for use in amino acid chemical)
IT 56-40-6, Glycine, reactions 56-41-7, L-Alanine, reactions 56-45-1, L-Serine, reactions 56-84-8, h-Asp-oh, reactions 56-85-9, L-Glutamine, reactions 56-86-0, L-Glutamic acid, reactions 56-89-3, Cystine, reactions 60-18-4, L-Tyrosine, reactions 61-90-5, L-Leucine, reactions 63-68-3, h-Met-oh, reactions 63-91-2, L-Phenylalanine, reactions 70-47-3, L-Asparagine, reactions 72-18-4, L-Valine, reactions 72-19-5, L-Threonine, reactions 73-22-3, h-Trp-oh, reactions 73-32-5, L-Isoleucine, reactions 91-21-4 108-91-8, Cyclohexanamine, reactions 147-85-3, L-Proline, reactions 153-94-6, D-Tryptophan 312-84-5, D-Serine 319-78-8, D-Isoleucine 328-38-1, D-Leucine 338-69-2, D-Alanine 344-25-2, D-Proline 348-67-4, D-Methionine 349-46-2, D-Cystine 556-02-5, D-Tyrosine 632-20-2, D-Threonine 640-68-6, D-Valine 673-06-3, D-Phenylalanine 1161-13-3 1783-96-6, D-Aspartic acid 2058-58-4, D-Asparagine 2418-95-3 2740-83-2 3054-01-1 3731-53-1, 4-Pyridinemethanamine 5959-95-5, D-Glutamine 6893-26-1, D-Glutamic acid 31202-69-4 495388-45-9 556050-47-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation and use of fluorous carbobenzyloxy reagents for use in amino acid chemical)
IT 356055-76-0P 356055-77-1P **556050-48-7P** 556050-49-8P
556050-59-0P 556050-78-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and use of fluorous carbobenzyloxy reagents for use in amino acid chemical)
IT 556050-50-1P 556050-51-2P 556050-52-3P 556050-54-5P 556050-56-7P
556050-58-9P 556050-61-4P 556050-62-5P 556050-64-7P 556050-66-9P
556050-67-0P 556050-68-1P 556050-69-2P 556050-70-5P 556050-71-6P

556050-72-7P 556050-73-8P 556050-74-9P 556050-75-0P 556050-76-1P
556050-77-2P 556050-79-4P 556050-80-7P 556050-81-8P 556050-82-9P
556050-83-0P 556050-84-1P 556050-85-2P 556050-86-3P 556050-87-4P
556050-88-5P 556050-89-6P 556050-90-9P 556050-91-0P 556050-92-1P
556050-93-2P 556050-94-3P 556050-95-4P 556050-96-5P 556050-97-6P
556050-98-7P 556050-99-8P 556051-00-4P 556051-01-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and use of fluorous carbobenzyloxy reagents for use in amino acid chemical)

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Anon; www.fluorous.com
(2) Curran, D; Angew Chem, Int Ed Engl 1998, V37, P1175 HCAPLUS
(3) Curran, D; J Am Chem Soc 1999, V121, P9069 HCAPLUS
(4) Curran, D; Stimulating Concepts in Chemistry 2000
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(11) Rover, S; Tetrahedron Lett 1999, V40, P5667 HCAPLUS
(12) Studer, A; Science 1997, V275, P823 HCAPLUS
(13) Wipf, P; Tetrahedron Lett 1999, V40, P4649 HCAPLUS
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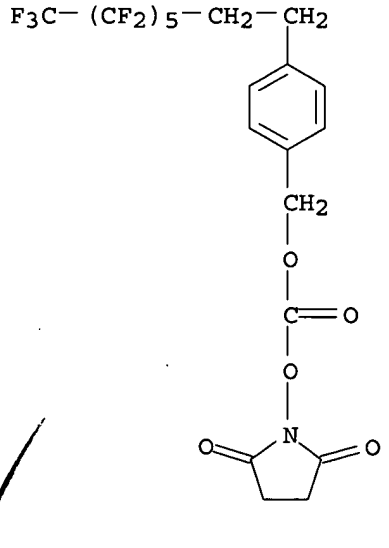
(15) Zhang, Q; J Am Chem Soc 2002, V124, P5774 HCAPLUS
(16) Zhang, W; J Am Chem Soc 2002, V124, P10443 HCAPLUS

IT **556050-48-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and use of fluorous carbobenzyloxy reagents for use in amino acid chemical)

RN 556050-48-7 HCAPLUS

CN 2,5-Pyrrolidinedione, 1-[[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)phenyl]methoxy]carbonyl]oxy]- (9CI) (CA INDEX NAME)



L66 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:196948 HCAPLUS

DN 138:221357

ED Entered STN: 12 Mar 2003

TI Preparation of 2'-aminomethylbiphenyl-2-carboxamides as Kv1.5 potassium

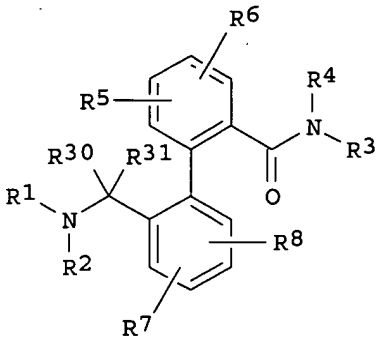
channel blockers
IN Brendel, Joachim; Schmidt, Wolfgang; Below, Peter
PA Aventis Pharma Deutschland GmbH, Germany
SO U.S., 65 pp., Cont.-in-part of U.S. Ser. No. 675,674.
CODEN: USXXAM
DT Patent
LA English
IC ICM A61K031-44
ICS C07D213-55; C07D213-56
NCL 514357000; 546264000; 546265000; 546266000; 546267000
CC 25-19 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
Section cross-reference(s): 1, 34
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	US 6531495	B1	20030311	US 2000-698078	20001030	<--
	DE 19947457	A1	20010405	DE 1999-19947457	19991002	<--
	US 2003171351	A1	20030911	US 2002-252385	20020924	<--
	US 6686395	B2	20040203			
	US 2004102513	A1	20040527	US 2003-691624	20031024	<--
PRAI	DE 1999-19947457	A	19991002	<--		
	US 2000-675674	A2	20000929	<--		
	US 2000-698078	A3	20001030	<--		
	US 2002-252385	A3	20020924			

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 6531495	ICM	A61K031-44
	ICS	C07D213-55; C07D213-56
	NCL	514357000; 546264000; 546265000; 546266000; 546267000
US 6531495	ECLA	C07C237/42; C07C335/16; C07D213/40B; C07D233/54C; C07C271/22; C07C271/54; C07C275/42; C07C311/06; C07C311/13; C07C311/19; C07C311/29; C07C311/46; C07C311/47; C07C317/18 <--
DE 19947457	ECLA	C07C237/42; C07C271/22; C07C271/54; C07C275/42; C07C311/06; C07C311/13; C07C311/19; C07C311/29; C07C311/46; C07C311/47; C07C317/18; C07C335/16; C07D213/40B; C07D233/54C <--
US 2003171351	ECLA	C07C237/42; C07C271/22; C07C271/54; C07C275/42; C07C311/06; C07C311/13; C07C311/19; C07C311/29; C07C311/46; C07C311/47; C07C317/18; C07C335/16; C07D213/40B; C07D233/54C <--
US 2004102513	ECLA	C07C237/42; C07C271/22; C07C271/54; C07C275/42; C07C311/06; C07C311/13; C07C311/19; C07C311/29; C07C311/46; C07C311/47; C07C317/18; C07C335/16; C07D213/40B; C07D233/54C <--

OS MARPAT 138:221357
GI



I

AB Title compds. [I; R1 = CO2R9, SO2R10, COR11, CONR12R13, CSNR12R13; R9, R10, R11, R12 = CmH2mR14; m = 0-4; R14 = (fluoro)alkyl, cycloalkyl, (un)substituted Ph, naphthyl, furyl, etc.; m ≠ 0 if R14 = (cyclo)alkoxy, SO2Me, or OPh; R2 and R13 = independently H, alkyl, or CF3; R3 = CnH2nR16 or CHR18R19; n = 0-4; n ≠ 0 if R16 = OR17, SO2Me; R17 = H, (cyclo)alkyl, (un)substituted Ph, or pyridyl, R16 = (fluoro)alkyl, cycloalkyl, (un)substituted Ph, naphthyl, furyl, etc.; R18 = H or CpH2pR16; p = 0-3; R19 = CO2H, CONH2, CH2OH, etc.; R4 = H, alkyl, or CF3; or NR3R4 = heterocyclyl; R5, R6, R7, R8 = independently H, halo, CF3, NO2, cyano, etc.; R30 and R31 = independently H or alkyl; CR30R31 = cyclopropyl; and pharmaceutically acceptable salts thereof] were prepared Thus, 2'-aminomethylbiphenyl-2-(N-phenethyl)carboxamide (preparation given) and NaHCO3 in dioxane and H2O were treated dropwise with 4-trifluoromethylbenzyl-N-succinimide carbonate (preparation given) in dioxane followed by 12 h stirring at room temperature to give 2'-(4-trifluoromethylbenzyloxycarbonylaminomethyl)-biphenyl-2-(N-phenethyl)carboxamide. Tested I inhibited Kv1.5 potassium flow with IC50 = 0.2 μM - 11.3 μM. Thus, I are especially suitable as antiarrhythmic active agents, in particular for the treatment and prophylaxis of atrial arrhythmia, e.g. atrial fibrillation (AF) or atrial flutter (no data).

ST aminomethylbiphenylcarboxamide prepn Kv15 potassium channel blocker; biphenylcarboxamide aminomethyl prepn Kv15 potassium channel blocker; heart disease treatment aminomethylbiphenylcarboxamide prepn; antiarrhythmic aminomethylbiphenylcarboxamide prepn

IT Heart, disease
(arrhythmia; preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)

IT Heart, disease
(atrial fibrillation; preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)

IT Heart, disease
(atrial flutter; preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)

IT Ion channel blockers
(potassium; preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)

IT Antiarrhythmics
Human
Solid phase synthesis
(preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)

IT Heart, disease
(supraventricular tachycardia; preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)

IT Potassium channel
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(voltage-gated, Kv1, blockers; preparation of aminomethylbiphenylcarboxamide

s as Kv1.5 potassium channel blockers)

IT Adrenoceptor antagonists
(β-, combination therapy; preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)

IT 332378-39-9P
RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(antiarrhythmic; preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)

IT 498577-28-9P
RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(antiarrhythmic; preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)

IT 498578-50-0P 498578-51-1P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(antiarrhythmic; preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)

IT

332378-34-4P	332378-35-5P	332378-36-6P	332378-37-7P	332378-38-8P
332378-40-2P	332378-41-3P	332378-42-4P	332378-43-5P	332378-44-6P
332378-45-7P	332378-46-8P	332378-47-9P	332378-48-0P	332378-49-1P
332378-50-4P	332378-51-5P	332378-52-6P	332378-53-7P	332378-54-8P
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332378-60-6P	332378-61-7P	332378-62-8P	332378-63-9P	332378-64-0P
332378-65-1P	332378-66-2P	332378-67-3P	332378-68-4P	332378-69-5P
332378-70-8P	332378-71-9P	332378-72-0P	332378-73-1P	332378-74-2P
332378-75-3P	332378-76-4P	332378-77-5P	332378-78-6P	332378-79-7P
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498579-18-3P 498579-21-8P 498579-43-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(antiarrhythmic; preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)

IT 4445-34-5P, Dibenz[c,e]oxepin-5(7H)-one 31638-34-3P 119297-30-2P
158066-11-6P 160232-14-4P 160233-31-8P 332378-21-9P
332378-22-0P 332378-23-1P 332378-24-2P 332378-25-3P
332378-26-4P 332378-27-5P 332378-28-6P 332378-29-7P 332378-30-0P
332378-31-1P 332378-32-2P 332378-33-3P 498577-23-4P 498577-24-5P
498577-25-6P 498577-26-7P 498577-27-8P 498578-54-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)

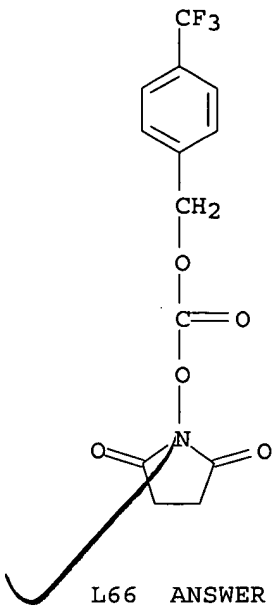
IT 62-53-3, Aniline, reactions 64-04-0, Benzeneethanamine 79-22-1, Methyl chloroformate 98-09-9, Benzenesulfonyl chloride 98-88-4, Benzoyl chloride 100-46-9, Benzylamine, reactions 103-67-3, Benzylmethylamine 103-71-9, Phenyl isocyanate, reactions 107-85-7, Isopentylamine 108-91-8, Cyclohexylamine, reactions 111-92-2, Dibutylamine 121-51-7, 3-Nitrobenzenesulfonyl chloride 349-88-2, 4-Fluorobenzenesulfonyl chloride 349-95-1, 4-Trifluoromethylbenzyl alcohol 403-41-8 454-91-1, α-Methyl-3-(trifluoromethyl)benzyl alcohol 461-18-7, 4,4,4-Trifluorobutanol 501-53-1, Benzyl chloroformate 592-34-7, Butyl chloroformate 701-27-9, 3-Fluorobenzenesulfonyl chloride 753-90-2, 2,2,2-Trifluoroethylamine 777-44-6, 3-Trifluoromethylbenzenesulfonyl chloride 1445-91-6, (S)-1-Phenylethanol 1517-69-7, (R)-1-Phenylethanol 1737-26-4 1788-10-9, 4-Acetylbenzenesulfonyl chloride 1885-14-9, Phenyl chloroformate 2706-56-1, 2-(2-Pyridyl)ethylamine 4693-91-8, 4-Methoxyphenylacetyl chloride 5638-76-6, 2-[2-(Methylaminoethyl)]pyridine 6050-13-1, Diphenic acid anhydride 7524-50-7, L-Phenylalanine methyl ester hydrochloride 10147-37-2, Isopropylsulfonyl chloride 10466-61-2 13139-17-8 16712-69-9, 4-Ethylbenzenesulfonyl chloride 20412-38-8, Neopentyl chloroformate 22135-49-5, (S)-1-Phenyl-1-butanol 24424-99-5, Di-tert-butyl dicarbonate 31140-40-6 39545-31-8 57903-15-8 72235-52-0, 2,4-Difluorobenzylamine 79756-81-3 87327-65-9 184888-43-5, N-Boc-(R)-1-Phenylethylamine 349085-94-5, 2-Bromo-N-(3-methylbutyl)benzamide 498577-47-2 498578-43-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE
(1) Anon; EP 620216 1994 HCAPLUS
(2) Anon; WO 9625936 1996 HCAPLUS
(3) Anon; WO 9804521 1998 HCAPLUS
(4) Anon; WO 9818475 1998 HCAPLUS
(5) Anon; WO 9818476 1998 HCAPLUS
(6) Anon; CAPLUS 2001:608248 2001
(7) Lullman, H; Pharmakologie und Toxikologie, 1999, P151
(8) Setoi; US 5521170 A 1996 HCAPLUS
(9) Volker, B; Helvetica Chimica Acta 1994, V77, P70

IT **332378-22-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)

RN 332378-22-0 HCAPLUS
CN 2,5-Pyrrolidinedione, 1-[[[[4-(trifluoromethyl)phenyl]methoxy]carbonyl]oxy]- (9CI) (CA INDEX NAME)



L66 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:193044 HCAPLUS
DN 138:187521
ED Entered STN: 12 Mar 2003
TI Preparation of 2'-aminomethylbiphenyl-2-carboxamides as Kv1.5 potassium channel blockers.
IN Brendel, Joachim; Schmidt, Wolfgang; Below, Peter
PA Aventis Pharma Deutschland G.m.b.H., Germany
SO PCT Int. Appl., 125 pp.
CODEN: PIXXD2
DT Patent
LA German
IC ICM C07C271-22
ICS C07D213-40; C07C311-19; C07C311-06; C07C311-13; C07C233-11; C07C233-87; C07C235-38; C07C275-28; C07C275-24; C07C335-16; C07C335-12; C07D233-54; A61K031-165; A61P009-06
CC 25-19 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
Section cross-reference(s): 1, 34
FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001025189	A1	20010412	WO 2000-EP9151	20000919 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
DE 19947457	A1	20010405	DE 1999-19947457	19991002 <--
CA 2385859	AA	20010412	CA 2000-2385859	20000919 <--
BR 2000014465	A	20020611	BR 2000-14465	20000919 <--
EP 1222163	A1	20020717	EP 2000-967703	20000919 <--
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JP 2003511363	T2	20030325	JP 2001-528137	20000919 <--
EE 200200160	A	20030415	EE 2002-160	20000919 <--
AU 766365	B2	20031016	AU 2000-77778	20000919 <--

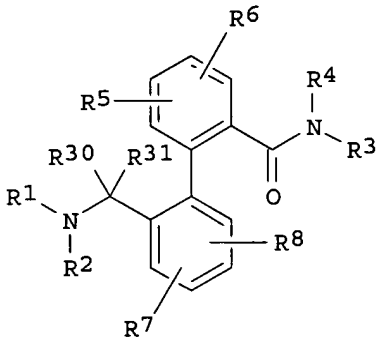
NZ 518065	A	20040827	NZ 2000-518065	20000919	<--
NO 2002001398	A	20020531	NO 2002-1398	20020320	<--
PRAI DE 1999-19947457	A	19991002	<--		
WO 2000-EP9151	W	20000919	<--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2001025189	ICM	C07C271-22
	ICS	C07D213-40; C07C311-19; C07C311-06; C07C311-13; C07C233-11; C07C233-87; C07C235-38; C07C275-28; C07C275-24; C07C335-16; C07C335-12; C07D233-54; A61K031-165; A61P009-06
DE 19947457	ECLA	C07C237/42; C07C271/22; C07C271/54; C07C275/42; C07C311/06; C07C311/13; C07C311/19; C07C311/29; C07C311/46; C07C311/47; C07C317/18; C07C335/16; C07D213/40B; C07D233/54C <--

OS MARPAT 138:187521

GI



I

AB Title compds. [I; R1 = CO2R9, SO2R10, COR11, CONR12R13, CSNR12R13; R9, R10, R11, R12 = CmH2mR14; m = 0-4; R14 = (fluoro)alkyl, cycloalkyl, (un)substituted Ph, naphthyl, furyl, etc.; m ≠ 0 if R14 = (cyclo)alkoxy, SO2Me, or OPh; R2 and R13 = independently H, alkyl, or CF3; R3 = CnH2nR16 or CHR18R19; n = 0-4; n ≠ 0 if R16 = OR17, SO2Me; R17 = H, (cyclo)alkyl, (un)substituted Ph, or pyridyl, R16 = (fluoro)alkyl, cycloalkyl, (un)substituted Ph, naphthyl, furyl, etc.; R18 = H or CpH2pR16; p = 0-3; R19 = CO2H, CONH2, CH2OH, etc.; R4 = H, alkyl, or CF3; or NR3R4 = heterocyclyl; R5, R6, R7, R8 = independently H, halo, CF3, NO2, cyano, etc.; R30 and R31 = independently H or alkyl; CR30R31 = cyclopropyl; and pharmaceutically acceptable salts thereof] were prepared Thus, 2'-aminomethylbiphenyl-2-(N-phenethyl)carboxamide (preparation given) and NaHCO3 in dioxane and H2O were treated dropwise with 4-trifluoromethylbenzyl-N-succinimide carbonate (preparation given) in dioxane followed by 12 h stirring at room temperature to give 2'-(4-trifluoromethylbenzyloxycarbonylaminomethyl)-biphenyl-2-(N-phenethyl)carboxamide. Tested I inhibited Kv1.5 potassium flow with IC50 = 0.2 μM - 11.3 μM. Thus, I are especially suitable as antiarrhythmic active agents, in particular for the treatment and prophylaxis of atrial arrhythmia, e.g. atrial fibrillation (AF) or atrial flutter (no data).

ST aminomethylbiphenylcarboxamide prepn Kv15 potassium channel blocker; biphenylcarboxamide aminomethyl prepn Kv15 potassium channel blocker; heart disease treatment aminomethylbiphenylcarboxamide prepn; antiarrhythmic aminomethylbiphenylcarboxamide

IT Heart, disease
(arrhythmia; preparation of aminomethylbiphenylcarboxamides as Kv1.5

potassium channel blockers)
IT Heart, disease
(atrial fibrillation; preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)
IT Heart, disease
(atrial flutter; preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)
IT Ion channel blockers
(potassium; preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)
IT Antiarrhythmics
Solid phase synthesis
(preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)
IT Heart, disease
(supraventricular tachycardia; preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)
IT Potassium channel
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(voltage-gated, Kv1, blockers; preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)
IT Adrenoceptor antagonists
(β-, combination therapy; preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)
IT 332378-39-9P
RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(antiarrhythmic; preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)
IT 498577-28-9P
RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(antiarrhythmic; preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)
IT 498578-50-0P 498578-51-1P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(antiarrhythmic; preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)
IT 332378-34-4P 332378-35-5P 332378-36-6P 332378-37-7P 332378-38-8P
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332378-45-7P 332378-46-8P 332378-47-9P 332378-48-0P 332378-49-1P
332378-50-4P 332378-51-5P 332378-52-6P 332378-53-7P 332378-54-8P
332378-55-9P 332378-56-0P 332378-57-1P 332378-58-2P 332378-59-3P
332378-60-6P 332378-61-7P 332378-62-8P 332378-63-9P 332378-64-0P
332378-65-1P 332378-66-2P 332378-67-3P 332378-68-4P 332378-69-5P
332378-70-8P 332378-71-9P 332378-72-0P 332378-73-1P 332378-74-2P
332378-75-3P 332378-76-4P 332378-77-5P 332378-78-6P 332378-79-7P
332378-80-0P 332378-81-1P 332378-82-2P 498577-29-0P 498577-30-3P
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498578-12-4P 498578-13-5P 498578-14-6P 498578-15-7P 498578-16-8P
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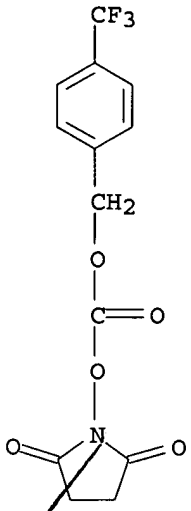
498579-04-7P 498579-07-0P 498579-09-2P 498579-13-8P 498579-15-0P
498579-18-3P 498579-21-8P 498579-43-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(antiarrhythmic; preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)

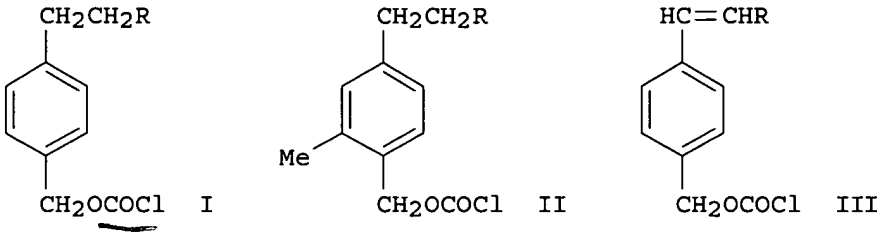
IT 4445-34-5P, Dibenz[c,e]oxepin-5(7H)-one 31638-34-3P 119297-30-2P
158066-11-6P 160232-14-4P 160233-31-8P 332378-21-9P
332378-22-0P 332378-23-1P 332378-24-2P 332378-25-3P
332378-26-4P 332378-27-5P 332378-28-6P 332378-29-7P 332378-30-0P
332378-31-1P 332378-32-2P 332378-33-3P 498577-23-4P 498577-24-5P
498577-25-6P 498577-26-7P 498577-27-8P 498578-54-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)

IT 62-53-3, Aniline, reactions 64-04-0, Benzeneethanamine 79-22-1, Methyl chloroformate 98-09-9, Benzenesulfonyl chloride 98-88-4, Benzoyl chloride 100-46-9, Benzylamine, reactions 103-67-3, Benzylmethylamine 103-71-9, Phenyl isocyanate, reactions 107-85-7, Isopentylamine 108-91-8, Cyclohexylamine, reactions 111-92-2, Dibutylamine 121-51-7, 3-Nitrobenzenesulfonyl chloride 349-88-2, 4-Fluorobenzenesulfonyl chloride 349-95-1, 4-Trifluoromethylbenzyl alcohol 403-41-8 454-91-1, α-Methyl-3-(trifluoromethyl)benzyl alcohol 461-18-7, 4,4,4-Trifluorobutanol 501-53-1, Benzyl chloroformate 592-34-7, Butyl chloroformate 701-27-9, 3-Fluorobenzenesulfonyl chloride 753-90-2, 2,2,2-Trifluoroethylamine 777-44-6, 3-Trifluoromethylbenzenesulfonyl chloride 1445-91-6, (S)-1-Phenylethanol 1517-69-7, (R)-1-Phenylethanol 1737-26-4 1788-10-9, 4-Acetylbenzenesulfonyl chloride 1885-14-9, Phenyl chloroformate 2706-56-1, 2-(2-Pyridyl)ethylamine 4693-91-8, 4-Methoxyphenylacetyl chloride 5638-76-6, 2-[2-(Methylaminoethyl)]pyridine 6050-13-1, Diphenic acid anhydride 7524-50-7, L-Phenylalanine methyl ester hydrochloride 10147-37-2, Isopropylsulfonyl chloride 10466-61-2 13139-17-8 16712-69-9, 4-Ethylbenzenesulfonyl chloride 20412-38-8, Neopentyl chloroformate 22135-49-5, (S)-1-Phenyl-1-butanol 24424-99-5, Di-tert-butyl dicarbonate 31140-40-6 39545-31-8 57903-15-8 72235-52-0, 2,4-Difluorobenzylamine 79756-81-3 87327-65-9 184888-43-5, N-Boc-(R)-1-Phenylethylamine 349085-94-5, 2-Bromo-N-(3-methylbutyl)benzamide 498577-47-2 498578-43-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel

blockers)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Brandmeier, V; HELV CHIM ACTA 1994, V77(1), P70 HCAPLUS
(2) Fujisawa Pharmaceutical Co; EP 0620216 A 1994 HCAPLUS
(3) Lullman, H; Pharmakologie und Toxikologie 1999, P151
IT **332378-22-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)
RN 332378-22-0 HCAPLUS
CN 2,5-Pyrrolidinedione, 1-[[[[4-(trifluoromethyl)phenyl]methoxy]carbonyl]oxy]- (9CI) (CA INDEX NAME)



L66 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:769179 HCAPLUS
DN 138:153811
ED Entered STN: 10 Oct 2002
TI Use of benzyloxycarbonyl (Z)-based fluorophilic tagging reagents in the purification of synthetic peptides
AU Filippov, Dmitri V.; van Zoelen, Dirk J.; Oldfield, Steven P.; van der Marel, Gijs A.; Overkleeft, Herman S.; Drijfhout, Jan W.; van Boom, Jacques H.
CS Leiden Institute of Chemistry, Leiden University, Leiden, 2300 RA, Neth.
SO Tetrahedron Letters (**2002**), 43(43), 7809-7812
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier Science Ltd.
DT Journal
LA English
CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 80
OS CASREACT 138:153811
GI



AB Three novel fluorinated benzyloxycarbonyl (Cbz) derivs. I-III [R = (CF2)7CF3] were synthesized and used for tagging peptides prepared by Fmoc-based solid-phase approach. The use of a benzyloxycarbonyl-based fluorinated tag facilitated the purification of peptides by fluorous reversed-phase chromatog.

ST benzyloxycarbonyl fluorophilic prepn peptide tagging reagent chromatog; peptide purifn fluorous reversed phase chromatog

IT Solid phase synthesis
(peptide; solid-phase preparation of peptides containing Cbz-based fluorophilic tagging groups useful for purification by fluorous reversed-phase chromatog.)

IT Purification
(solid-phase preparation of peptides containing Cbz-based fluorophilic tagging groups useful for purification by fluorous reversed-phase chromatog.)

IT Peptides, preparation
RL: PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)
(solid-phase preparation of peptides containing Cbz-based fluorophilic tagging groups useful for purification by fluorous reversed-phase chromatog.)

IT 172418-32-5
RL: CAT (Catalyst use); USES (Uses)
(preparation of Cbz-based fluorophilic tagging reagents for purification of synthetic peptides by fluorous reversed-phase chromatog.)

IT **495388-41-5P 495388-42-6P 495388-43-7P**
RL: NUU (Other use, unclassified); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of Cbz-based fluorophilic tagging reagents for purification of synthetic peptides by fluorous reversed-phase chromatog.)

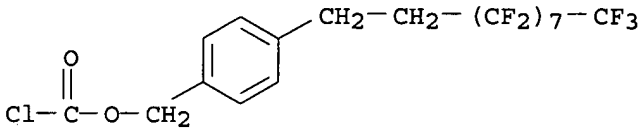
IT 619-42-1 21652-58-4 99548-55-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of Cbz-based fluorophilic tagging reagents for purification of synthetic peptides by fluorous reversed-phase chromatog.)

IT 495388-44-8P 495388-45-9P 495388-46-0P 495388-47-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of Cbz-based fluorophilic tagging reagents for purification of synthetic peptides by fluorous reversed-phase chromatog.)

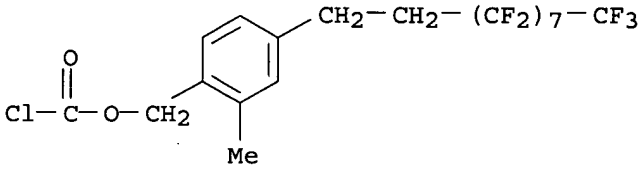
IT 495388-50-6P 495388-52-8P 495388-53-9P 495388-54-0P
RL: PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(solid-phase preparation of peptides containing Cbz-based fluorophilic tagging groups useful for purification by fluorous reversed-phase chromatog.)

IT 495388-51-7P 495388-55-1P 495388-56-2P
RL: PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)
(solid-phase preparation of peptides containing Cbz-based fluorophilic tagging

groups useful for purification by fluorous reversed-phase chromatog.)
IT 495388-48-2DP, resin-bound 495388-49-3DP, resin-bound 496030-80-9DP, resin-bound
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(solid-phase preparation of peptides containing Cbz-based fluorophilic tagging
groups useful for purification by fluorous reversed-phase chromatog.)
RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Aletras, A; Int J Peptide Protein Res 1995, V45, P488 HCAPLUS
(2) Ball, H; Int J Peptide Protein Res 1996, V48, P31 HCAPLUS
(3) Chen, W; Tetrahedron Lett 2001, V42, P4275 HCAPLUS
(4) Curran, D; J Am Chem Soc 1999, V121, P9069 HCAPLUS
(5) Fields, G; J Peptide Protein Res 1990, V35, P161 HCAPLUS
(6) Funakoshi, S; J Chromatogr 1993, V638, P21 HCAPLUS
(7) Hancock, W; Anal Biochem 1976, V71, P260 HCAPLUS
(8) Herrmann, W; Chem Eur J 1997, V3, P1357 HCAPLUS
(9) Kaiser, E; Anal Biochem 1970, V34, P595 HCAPLUS
(10) Kent, S; Annu Rev Biochem 1988, V57, P957 HCAPLUS
(11) Keuning, K; Recl Trav Chim Pays-Bas 1935, V54, P73 HCAPLUS
(12) Luo, Z; J Org Chem 2001, V66, P4261 HCAPLUS
(13) Luo, Z; Science 2001, V291, P1766 HCAPLUS
(14) Merrifield, R; J Am Chem Soc 1963, V85, P2149 HCAPLUS
(15) Merrifield, R; J Org Chem 1978, V43, P4808 HCAPLUS
(16) Schwinn, D; Helv Chim Acta 2002, V85, P255 HCAPLUS
IT **495388-41-5P 495388-42-6P 495388-43-7P**
RL: NUU (Other use, unclassified); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of Cbz-based fluorophilic tagging reagents for purification of synthetic peptides by fluorous reversed-phase chromatog.)
RN 495388-41-5 HCAPLUS
CN Carbonochloridic acid, [4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methyl ester (9CI) (CA INDEX NAME)

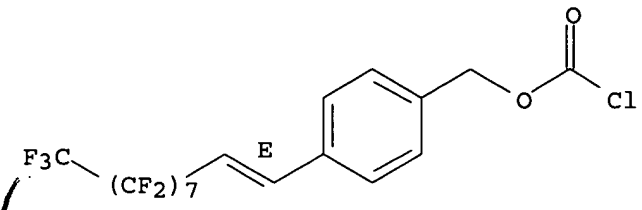


RN 495388-42-6 HCAPLUS
CN Carbonochloridic acid, [4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)-2-methylphenyl]methyl ester (9CI) (CA INDEX NAME)



RN 495388-43-7 HCAPLUS
CN Carbonochloridic acid, [4-[(1E)-3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-1-decenyl]phenyl]methyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L66 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:239812 HCAPLUS
DN 134:280606
ED Entered STN: 05 Apr 2001
TI Preparation of 2'-aminomethylbiphenyl-2-carboxamides as Kv1.5 potassium channel blockers.
IN Brendel, Joachim; Schmidt, Wolfgang; Below, Peter
PA Aventis Pharma Deutschland G.m.b.H., Germany
SO Ger. Offen., 28 pp.
CODEN: GWXXBX
DT Patent
LA German
IC ICM C07C233-64
ICS A61K031-166; A61P009-06
CC 25-19 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
Section cross-reference(s): 1
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19947457	A1	20010405	DE 1999-19947457	19991002 <--
	CA 2385859	AA	20010412	CA 2000-2385859	20000919 <--
	WO 2001025189	A1	20010412	WO 2000-EP9151	20000919 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
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CLASS

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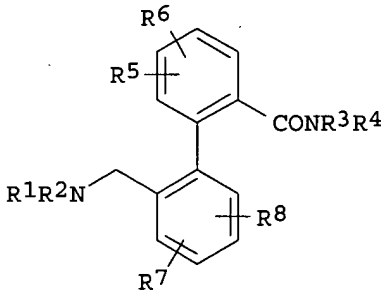

I

AB Title compds. [I; R1 = CO2R9, SO2R10, COR11, CONR12R13, CSNR12R13; R9, R10, R11, R12 = CmH2mR14; m = 0-4; R14 = (F-substituted) alkyl, cycloalkyl, (substituted) Ph, naphthyl, furyl, etc.; m ≠ 0 if R14 = alkoxy, cycloalkoxy, SO2Me, OCF3; R13 = H, alkyl; R2 = H, alkyl; R3 = CnH2nR16, n = 0-4; n ≠ 0 if R16 = OR17, SO2Me; R17 = H, alkyl, cycloalkyl, CF3, (substituted) Ph, etc., R16 = (F-substituted) alkyl, cycloalkyl, (substituted) Ph, naphthyl, furyl, etc.; R4 = H, alkyl, etc.; R5, R6, R7, R8 = H, halo, CF3, NO2, cyano, etc.] were prepared Thus, 2'-aminomethylbiphenyl-2-(N-phenethyl)carboxamide (preparation given) and NaHCO3 in dioxane and H2O were treated dropwise with 4-trifluoromethylbenzyl-N-succinimide carbonate (preparation given) in dioxane followed by 12 h stirring at room temperature to give 2'-(4-trifluoromethylbenzyloxycarbonylaminomethyl)-biphenyl-2-(N-phenethyl)carboxamide. Tested I inhibited Kv1.5 potassium flow with IC50 = 0.3-6.1 μM. β-Blockers and IKs-channel blockers can be used for the tablet formulation.

ST aminomethylbiphenylcarboxamide prepn Kv15 potassium channel blocker; biphenylcarboxamide aminomethyl prepn Kv15 potassium channel blocker; heart disease treatment aminomethylbiphenylcarboxamide prepn; antiarrhythmic aminomethylbiphenylcarboxamide

IT Potassium channel
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Kv1 (potassium channel-forming, voltage-regulated, 1), blockers;

preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)

IT Heart, disease
(atrial fibrillation; preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)

IT Ion channel blockers
(potassium; preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)

IT Antiarrhythmics
(preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)

IT Heart, disease
(supraventricular tachycardia; preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)

IT Adrenoceptor antagonists
(β-, combination therapy; preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)

IT 332378-34-4P 332378-35-5P 332378-36-6P 332378-37-7P 332378-38-8P
332378-39-9P 332378-40-2P 332378-41-3P 332378-42-4P 332378-43-5P
332378-44-6P 332378-45-7P 332378-46-8P 332378-47-9P 332378-48-0P
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332378-74-2P 332378-75-3P 332378-76-4P 332378-77-5P 332378-78-6P
332378-79-7P 332378-80-0P 332378-81-1P 332378-82-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)

IT 62-53-3, Aniline, reactions 64-04-0, Benzeneethanamine 79-22-1, Methyl chloroformate 98-09-9, Benzenesulfonyl chloride 98-88-4, Benzoyl chloride 100-46-9, Benzylamine, reactions 103-67-3, Benzylmethylamine 103-71-9, Phenyl isocyanate, reactions 107-85-7, Isopentylamine 108-91-8, Cyclohexylamine, reactions 111-92-2, Dibutylamine 121-51-7, 3-Nitrobenzenesulfonyl chloride 349-88-2, 4-Fluorobenzenesulfonyl chloride 349-95-1, 4-Trifluoromethylbenzyl alcohol 461-18-7, 4,4,4-Trifluorobutanol 501-53-1, Benzyl chloroformate 592-34-7, Butyl chloroformate 701-27-9, 3-Fluorobenzenesulfonyl chloride 753-90-2, 2,2,2-Trifluoroethylamine 777-44-6, 3-Trifluoromethylbenzenesulfonyl chloride 1737-26-4 1788-10-9, 4-Acetylbenzenesulfonyl chloride 1885-14-9, Phenyl chloroformate 2706-56-1, 2-(2-Pyridyl)ethylamine 5638-76-6, 2-[2-(Methylaminoethyl)]pyridine 6050-13-1, Diphenic acid anhydride 10147-37-2, Isopropylsulfonyl chloride 13139-17-8 16712-69-9, 4-Ethylbenzenesulfonyl chloride 20412-38-8, Neopentyl chloroformate 31140-40-6 39545-31-8 57903-15-8 72235-52-0, 2,4-Difluorobenzylamine
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)

IT 4445-34-5P, Dibenz[c,e]oxepin-5(7H)-one 31638-34-3P 119297-30-2P
332378-21-9P **332378-22-0P** 332378-23-1P 332378-24-2P
332378-25-3P 332378-26-4P 332378-27-5P 332378-28-6P 332378-29-7P
332378-30-0P 332378-31-1P 332378-32-2P 332378-33-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)

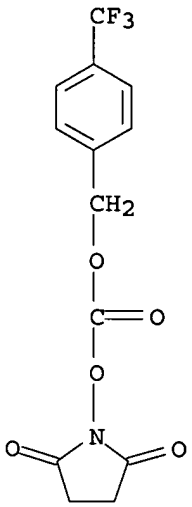
IT 7524-50-7, L-Phenylalanine methyl ester hydrochloride 10466-61-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(with Et3N; preparation of aminomethylbiphenylcarboxamides as Kv1.5

potassium channel blockers)

IT **332378-22-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of aminomethylbiphenylcarboxamides as Kv1.5 potassium channel blockers)

RN 332378-22-0 HCAPLUS

CN 2,5-Pyrrolidinedione, 1-[[[[4-(trifluoromethyl)phenyl]methoxy]carbonyl]oxy]- (9CI) (CA INDEX NAME)



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L67 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:991071 HCAPLUS

DN 142:134436

ED Entered STN: 19 Nov 2004

TI Fluorous Mixture Synthesis of 4-Alkylidene Cyclopentenones via a Rhodium-Catalyzed [2+2+1] Cycloaddition of Alkynyl Allenes

AU Manku, Sukhdev; Curran, Dennis P.

CS Department of Chemistry, University of Pittsburgh, Pittsburgh, PA, 15260, USA

SO Journal of Combinatorial Chemistry (2005), 7(1), 63-68
CODEN: JCCHFF; ISSN: 1520-4766

PB American Chemical Society

DT Journal

LA English

CC 27-18 (Heterocyclic Compounds (One Hetero Atom))

OS CASREACT 142:134436

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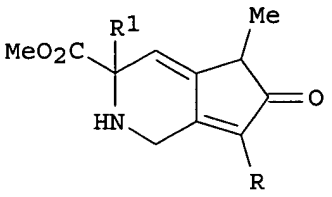

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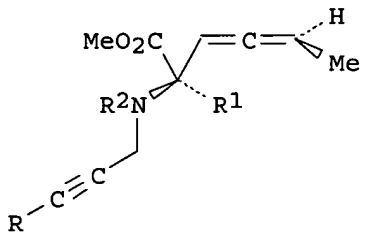

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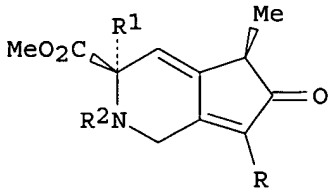

III

AB A combinatorial library of 16 oxodihydropyrindolecarboxylate hydrochlorides I•HCl (R = Me, Ph, BuCH2, Me2CHCH2; R1 = Me, EtCH2, Me2CHCH2, PhCH2) is prepared from amino acids and propargyl bromides using (fluoroalkylethyl)benzyl protecting groups to allow the reaction products to be separated readily by conventional silica gel chromatog. Protection of amino acids with the N-hydroxysuccinimidyl esters of 4-(2-fluoroalkylethyl)benzylcarbonic acids yields protected amino acids 4-R2NHCH(R1)CO2H [R1 = Me, PhCH2, EtCH2, Me2CHCH2; R2 = 4-R3CH2CH2C6H4CH2OCO; R3 = F3C(CF2)n, (F3C)2CF(CF2)6; n = 3, 5, 7] of which four are selected for use in the combinatorial library synthesis because of their separability. Esterification of the fluorous protected amino acids with 4-trimethylsilyl-3-butyn-2-ol yields individual fluorous protected amino acid propargyl esters. Claisen rearrangement of zinc enolates of the amino acid esters, methylation of the free acids, desilylation, and alkylation of the amino groups with propargyl bromides yields allenyl amino acids II [R = Me, Ph, BuCH2, Me2CHCH2; R1 = Me, EtCH2, Me2CHCH2, PhCH2; R2 = 4-R3CH2CH2C6H4CH2OCO; R3 = F3C(CF2)n, (F3C)2CF(CF2)6; n = 3, 5, 7] diastereoselectively as mixts. derived from a single propargyl bromide starting material. In the key step, Pauson-Khand cyclocarbonylation of mixts. of II in the presence of bis(chlorodicarbonylrhodium), triphenylphosphine, and silver tetrafluoroborate in dichloroethane at 40° yields oxodihydropyrindolecarboxylates III [R = Me, Ph, BuCH2, Me2CHCH2; R1 = Me, EtCH2, Me2CHCH2, PhCH2; R2 = 4-R3CH2CH2C6H4CH2OCO; R3 = F3C(CF2)n, (F3C)2CF(CF2)6; n = 3, 5, 7]. Cleavage of the fluorous benzylcarbamate protecting groups with di-Me sulfide and boron trifluoride etherate followed by treatment with hydrogen chloride in ether yields the title compds. I•HCl; the deprotection conditions erode the stereoselectivity of the overall reaction significantly, but other methods are not successful at removing the fluorous carbamate protecting groups.

ST alkylidene oxodihydropyrindolecarboxylate hydrochloride combinatorial library prepn; protected fluorous propargyl allenyl amino acid stereoselective prepn; fluorous benzylcarbamate protecting group sepn oxodihydropyrindolecarboxylate combinatorial library; stereoselective Pauson Khand reaction allenyl alkyne fluorous protecting group; combinatorial synthesis fluorous protecting group product sepn; rhodium catalyzed Pauson Khand cyclocarbonylation alkynyl allene

IT Combinatorial chemistry
Combinatorial library
Protective groups

(preparation of a combinatorial library of oxodihydropyrindolecarboxylates using fluorous protecting groups to facilitate separation with the rhodium-catalyzed Pauson-Khand reaction of alkynyl allenes as the key step)

IT Amino acids, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of a combinatorial library of oxodihydropyrindolecarboxylates using fluorous protecting groups to facilitate separation with the rhodium-catalyzed Pauson-Khand reaction of alkynyl allenes as the key step)

IT Pauson-Khand reaction
Pauson-Khand reaction catalysts
Stereoselective synthesis
(the use of a stereoselective rhodium-catalyzed Pauson-Khand reaction of alkynyl allenes as the key step in the preparation of a combinatorial library of oxodihydropyrindolecarboxylates using fluorous protecting groups)

IT 603-35-0, Triphenylphosphine, uses 14104-20-2, Silver tetrafluoroborate 14523-22-9, Bis(dicarbonylrhodium chloride)
RL: CAT (Catalyst use); USES (Uses)
(preparation of a combinatorial library of oxodihydropyrindolecarboxylates using fluorous protecting groups to facilitate separation with the rhodium-catalyzed Pauson-Khand reaction of alkynyl allenes as the key step)

IT 825636-09-7P 825636-10-0P 825636-11-1P 825636-12-2P 825636-13-3P
825636-14-4P 825636-15-5P 825636-16-6P 825636-17-7P 825636-18-8P
825636-19-9P 825636-20-2P 825636-21-3P 825636-22-4P 825636-23-5P
825636-24-6P
RL: CPN (Combinatorial preparation); CMBI (Combinatorial study); PREP (Preparation)
(preparation of a combinatorial library of oxodihydropyrindolecarboxylates using fluorous protecting groups to facilitate separation with the rhodium-catalyzed Pauson-Khand reaction of alkynyl allenes as the key step)

IT 825635-69-6P 825635-70-9P 825635-71-0P 825635-72-1P 825635-73-2P
825635-74-3P 825635-75-4P 825635-76-5P 825635-77-6P 825635-78-7P
825635-79-8P 825635-80-1P 825635-81-2P 825635-82-3P 825635-83-4P
825635-84-5P 825635-85-6P 825635-86-7P 825635-87-8P 825635-88-9P
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825636-04-2P 825636-05-3P 825636-06-4P 825636-07-5P 825636-08-6P
RL: CPN (Combinatorial preparation); CRT (Combinatorial reactant); RCT (Reactant); CMBI (Combinatorial study); PREP (Preparation); RACT (Reactant or reagent)
(preparation of a combinatorial library of oxodihydropyrindolecarboxylates using fluorous protecting groups to facilitate separation with the rhodium-catalyzed Pauson-Khand reaction of alkynyl allenes as the key step)

IT 1794-48-5, 1-Bromo-3-phenyl-2-propyne 3355-28-0, 1-Bromo-2-butyne 18495-27-7, 1-Bromo-2-octyne 185030-28-8, 1-Bromo-4-methyl-2-pentyne
RL: CRT (Combinatorial reactant); RCT (Reactant); CMBI (Combinatorial study); RACT (Reactant or reagent)
(preparation of a combinatorial library of oxodihydropyrindolecarboxylates using fluorous protecting groups to facilitate separation with the rhodium-catalyzed Pauson-Khand reaction of alkynyl allenes as the key step)

IT 825635-61-8P 825635-64-1P 825635-65-2P 825635-68-5P
RL: CRT (Combinatorial reactant); RCT (Reactant); SPN (Synthetic preparation); CMBI (Combinatorial study); PREP (Preparation); RACT (Reactant or reagent)
(preparation of a combinatorial library of oxodihydropyrindolecarboxylates using fluorous protecting groups to facilitate separation with the

rhodium-catalyzed Pauson-Khand reaction of alkynyl allenes as the key step)

IT 56-41-7, Alanine, reactions 61-90-5, Leucine, reactions 63-91-2, Phenylalanine, reactions 6600-40-4, Norvaline 6999-19-5, 4-(Trimethylsilyl)-3-butyn-2-ol **556050-48-7** 556050-49-8 **825635-46-9 825635-47-0**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of a combinatorial library of oxodihydropyrindolecarboxylates using fluorous protecting groups to facilitate separation with the rhodium-catalyzed Pauson-Khand reaction of alkynyl allenes as the key step)

IT 556050-59-0P 825635-48-1P 825635-51-6P 825635-53-8P 825635-54-9P 825635-56-1P 825635-57-2P 825635-60-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of a combinatorial library of oxodihydropyrindolecarboxylates using fluorous protecting groups to facilitate separation with the rhodium-catalyzed Pauson-Khand reaction of alkynyl allenes as the key step)

IT 556050-51-2P 556050-54-5P 825635-49-2P 825635-50-5P 825635-52-7P 825635-55-0P 825635-58-3P 825635-59-4P 825635-62-9P 825635-63-0P 825635-66-3P 825635-67-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of a combinatorial library of oxodihydropyrindolecarboxylates using fluorous protecting groups to facilitate separation with the rhodium-catalyzed Pauson-Khand reaction of alkynyl allenes as the key step)

RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD

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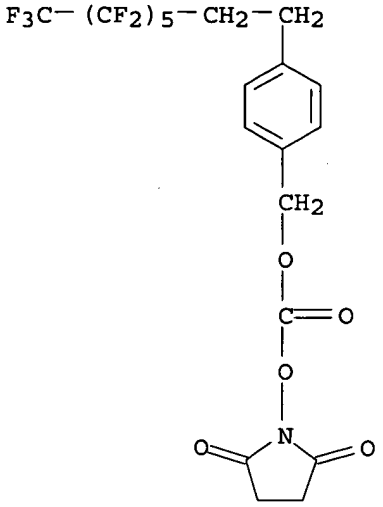
IT **556050-48-7 825635-46-9 825635-47-0**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of a combinatorial library of oxodihydropyrindolecarboxylates using fluorous protecting groups to facilitate separation with the rhodium-catalyzed Pauson-Khand reaction of alkynyl allenes as the key step)

RN 556050-48-7 HCAPLUS

CN 2,5-Pyrrolidinedione, 1-[[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)phenyl]methoxy]carbonyl]oxy]- (9CI) (CA INDEX NAME)



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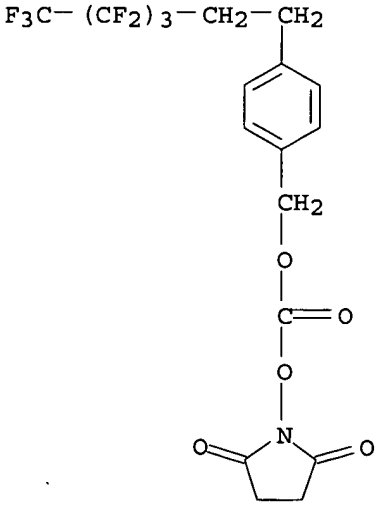

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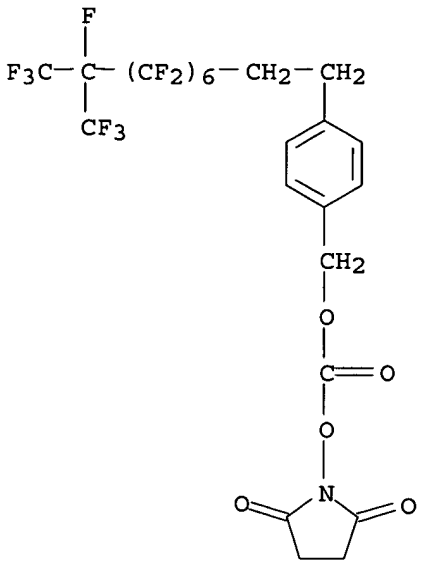

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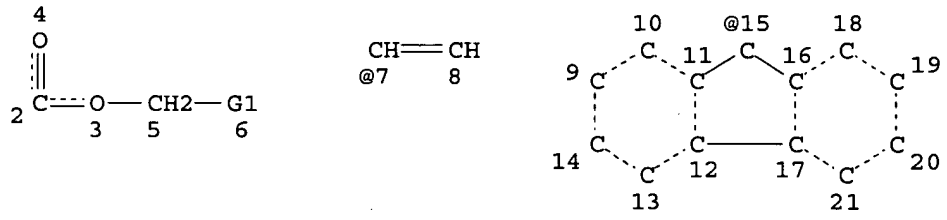

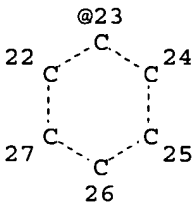

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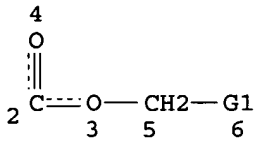


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L81  ANSWER 1 OF 2  HCAPLUS  COPYRIGHT 2005 ACS on STN
AN   2004:57304  HCAPLUS
DN   140:127844
ED   Entered STN:  23 Jan 2004
TI   Preparation of fluorinated silica gel support material for palladium
     catalyzed coupling reactions
IN   Bannwarth, Willi; Tzschucke, Carl Christoph; Glatz, Heiko; Schwinn,
     Dominik
PA   Albert-Ludwigs-Universitaet Freiburg, Germany
SO   Ger., 19 pp.
     CODEN: GWXXAW
DT   Patent
LA   German
IC   ICM  C07F007-08
     ICS  C07B037-00; C07B061-00
CC   21-2 (General Organic Chemistry)
     Section cross-reference(s): 35, 66
FAN.CNT 1
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PRAI DE 2002-10235225 A 20020801

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
DE 10235225	ICM	C07F007-08
	ICS	C07B037-00; C07B061-00
DE 10235225	ECLA	C07B037/04; C07B043/06; C07B061/00L

OS CASREACT 140:127844

AB The title support materials were synthesized and their use for palladium catalyzed coupling reactions is described. Thus, Rh(PPh3)3Cl-catalyzed silylation of HSi(CH2CH2C6F13)3 with triethoxyvinylsilane in THF gave 54% (EtO)3SiCH2CH2Si(CH2CH2C6F13)3 which on treatment with activated silica gel gave title support material. [(4-F17C8CH2CH2C6H4)3P]2PdCl2-catalyzed Suzuki reaction of 4-BrC6H4NO2 with PhB(OH)2 in the presence of above prepared fluorinated support material in DME gave quant. yield of 4-PhC6H4NO2. Also perfluoro-tagged benzyl alc. adsorbed on fluorous reversed-phase silica gel derivative via fluorous-fluorous interactions was prepared and used in the combinatorial synthesis of quinazolinediones by a fluorous biphasic concept without perfluorinated solvents.

ST fluorinated silica gel support material prepn catalyst coupling reaction; palladium catalyzed Suzuki Sonogashira coupling fluorinated silica gel support; cyclization perfluoro tagged benzyl alc carbamate anthanilamide quinazolinedione prepn; combinatorial synthesis quinazolinedione adsorption fluorous reversed phase silica gel; quinazolinedione synthesis combinatorial library; heterocyclization quinazolinedione prepn fluorous biphasic concept

IT Coupling reaction
Coupling reaction catalysts
(Sonogashira; fluorous biphasic catalysis in palladium-mediated Suzuki and Sonogashira couplings without perfluorinated solvents)

IT Acids, reactions
Group IIIA element compounds
RL: RCT (Reactant); RACT (Reactant or reagent)
(boronic acids, aryl-; fluorous biphasic catalysis in palladium-mediated Suzuki and Sonogashira couplings without perfluorinated solvents)

IT Suzuki coupling reaction
Suzuki coupling reaction catalysts
(fluorous biphasic catalysis in palladium-mediated Suzuki and Sonogashira couplings without perfluorinated solvents)

IT Aromatic hydrocarbons, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(halo; fluorous biphasic catalysis in palladium-mediated Suzuki and Sonogashira couplings without perfluorinated solvents)

IT Combinatorial library
Polymer-supported reagents
(preparation of fluorinated silica gel support material for palladium catalyzed coupling reactions and perfluoro-tagged benzyl alc. adsorbed on fluorous reversed-phase silica gel for combinatorial preparation of quinazolinediones)

IT Adsorption
Heterocyclization
(preparation of perfluoro-tagged benzyl alc. adsorbed on fluorous reversed-phase silica gel derivative via fluorous-fluorous interactions for combinatorial synthesis of quinazolinediones by a fluorous biphasic concept without perfluorinated solvents)

IT Silica gel, preparation
RL: CAT (Catalyst use); CRG (Combinatorial reagent); RGT (Reagent); SPN (Synthetic preparation); CMBI (Combinatorial study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(tridecafluorooctylated; preparation of fluorinated silica gel support for palladium catalyzed coupling reactions and perfluoro-tagged benzyl alc. adsorbed on fluorous reversed-phase silica gel for preparation of quinazolinediones)

IT 648945-88-4DP, reaction products with silica gel
RL: CRG (Combinatorial reagent); RGT (Reagent); SPN (Synthetic preparation); CMBI (Combinatorial study); PREP (Preparation); RACT (Reactant or reagent)
(FRPSG support; preparation of perfluoro-tagged benzyl alc. adsorbed on fluorous reversed-phase silica gel derivative via fluorous-fluorous interactions for synthesis of quinazolinediones by a fluorous biphasic concept without perfluorinated solvents)

IT 4441-56-9, Cyclohexylboronic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(attempted; fluorous biphasic catalysis in palladium-mediated Suzuki and Sonogashira couplings without perfluorinated solvents)

IT 326475-46-1 343343-17-9 480423-08-3
RL: CAT (Catalyst use); USES (Uses)
(fluorous biphasic catalysis in palladium-mediated Suzuki and Sonogashira couplings without perfluorinated solvents)

IT 98-80-6, Phenylboronic acid 99-90-1, 1-Acetyl-4-bromobenzene 104-92-7, 4-Bromoanisole 348-61-8, 3,4-Difluorobromobenzene 580-13-2, 2-Naphthyl bromide 586-78-7, 1-Bromo-4-nitrobenzene 696-62-8, 4-Iodoanisole 5720-07-0 5798-75-4, Ethyl 4-bromobenzoate 6165-69-1 138526-69-9, 3,4,5-Trifluoro-1-bromobenzene
RL: RCT (Reactant); RACT (Reactant or reagent)
(fluorous biphasic catalysis in palladium-mediated Suzuki and Sonogashira couplings without perfluorinated solvents)

IT 92-91-1P, p-Acetylbiphenyl 92-93-3P, p-Nitrobiphenyl 612-94-2P, 2-Phenylnaphthalene 613-37-6P, p-Methoxybiphenyl 732-80-9P 2143-90-0P 6301-56-0P, Ethyl biphenyl-4-carboxylate 13021-18-6P 28560-79-4P 67277-33-2P 172035-84-6P 178820-23-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(fluorous biphasic catalysis in palladium-mediated Suzuki and Sonogashira couplings without perfluorinated solvents)

IT 51851-37-7DP, reaction products with silica gel
RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(fluorous reversed-phase silica gel (FRPSG) support; preparation of fluorinated silica gel support material for palladium catalyzed coupling reactions)

IT 14694-95-2, [Chlorotris(triphenylphosphine)]rhodium
RL: CAT (Catalyst use); USES (Uses)
(preparation of fluorinated silica gel support material for palladium catalyzed coupling reactions)

IT 78-08-0, Triethoxyvinylsilane 536-74-3, Phenylacetylene 147701-73-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of fluorinated silica gel support material for palladium catalyzed coupling reactions)

IT 648945-88-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of fluorinated silica gel support material for palladium catalyzed coupling reactions)

IT 1942-30-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of fluorinated silica gel support material for palladium catalyzed coupling reactions)

IT 1932-42-9P 199587-91-2P 216311-76-1P 436855-78-6P 436855-81-1P

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531504-08-2P
RL: CPN (Combinatorial preparation); CMBI (Combinatorial study); PREP (Preparation)
(preparation of perfluoro-tagged benzyl alc. adsorbed on fluorous reversed-phase silica gel derivative via fluorous-fluorous interactions for combinatorial synthesis of quinazolinediones by a fluorous biphasic concept without perfluorinated solvents)

IT **436855-64-0P**
RL: CPN (Combinatorial preparation); CRT (Combinatorial reactant); RCT (Reactant); CMBI (Combinatorial study); PREP (Preparation); RACT (Reactant or reagent)
(preparation of perfluoro-tagged benzyl alc. adsorbed on fluorous reversed-phase silica gel derivative via fluorous-fluorous interactions for combinatorial synthesis of quinazolinediones by a fluorous biphasic concept without perfluorinated solvents)

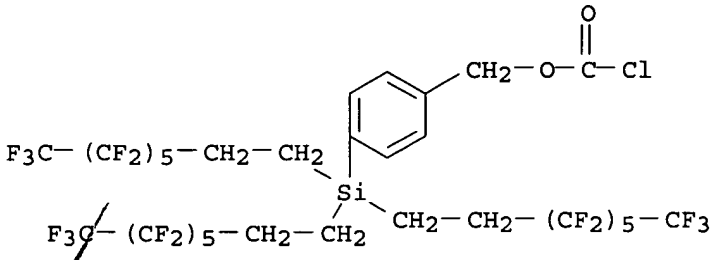
IT 89-77-0, 4-Chloroanthranilic acid 100-46-9, Benzylamine, reactions 118-92-3, Anthranilic acid 119-68-6, N-Methylanthranilic acid 156-41-2, 2-(4-Chlorophenyl)ethylamine 617-89-0, 2-Furanylmethylamine 6315-89-5, 3,4-Dimethoxyaniline 501661-50-3, N-(2-Furanylmethyl)anthranilic acid
RL: CRT (Combinatorial reactant); RCT (Reactant); CMBI (Combinatorial study); RACT (Reactant or reagent)
(preparation of perfluoro-tagged benzyl alc. adsorbed on fluorous reversed-phase silica gel derivative via fluorous-fluorous interactions for combinatorial synthesis of quinazolinediones by a fluorous biphasic concept without perfluorinated solvents)

IT 436855-48-0
RL: CRG (Combinatorial reagent); RGT (Reagent); CMBI (Combinatorial study); RACT (Reactant or reagent)
(preparation of perfluoro-tagged benzyl alc. adsorbed on fluorous reversed-phase silica gel derivative via fluorous-fluorous interactions for synthesis of quinazolinediones by a fluorous biphasic concept without perfluorinated solvents)

IT 503-38-8, Trichloromethyl chloroformate
RL: CRT (Combinatorial reactant); RCT (Reactant); CMBI (Combinatorial study); RACT (Reactant or reagent)
(preparation of perfluoro-tagged benzyl alc. adsorbed on fluorous reversed-phase silica gel derivative via fluorous-fluorous interactions for synthesis of quinazolinediones by a fluorous biphasic concept without perfluorinated solvents)

IT **436855-64-0P**
RL: CPN (Combinatorial preparation); CRT (Combinatorial reactant); RCT (Reactant); CMBI (Combinatorial study); PREP (Preparation); RACT (Reactant or reagent)
(preparation of perfluoro-tagged benzyl alc. adsorbed on fluorous reversed-phase silica gel derivative via fluorous-fluorous interactions for combinatorial synthesis of quinazolinediones by a fluorous biphasic concept without perfluorinated solvents)

RN 436855-64-0 HCAPLUS
CN Carbonochloridic acid, [4-[tris(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)silyl]phenyl]methyl ester (9CI) (CA INDEX NAME)



L81 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:127034 HCAPLUS
DN 137:32933
ED Entered STN: 19 Feb 2002
TI Perfluoro-tagged benzyloxycarbonyl protecting group and its application in fluorous biphasic systems
AU Schwinn, Dominik; Bannwarth, Willi
CS Institut fur Organische Chemie und Biochemie, Universitat Freiburg, Freiburg, D-79104, Germany
SO Helvetica Chimica Acta (2002), 85(1), 255-264
CODEN: HCACAV; ISSN: 0018-019X
PB Verlag Helvetica Chimica Acta
DT Journal
LA English
CC 21-2 (General Organic Chemistry)
OS CASREACT 137:32933
AB The synthesis of a new perfluoro-tagged benzyloxycarbonyl protecting group is reported, as well as its application in the parallel protection of amines. Isolation of the protected amines was performed by simple liquid-liquid extraction between perfluorinated and organic solvents. Deprotection was achieved by standard hydrogenolysis. The novel protecting group was also applied to cyclization protocols leading to quinazoline-2,4-diones. These products were isolated by simple extraction procedures.
ST perfluoro tagged benzyloxycarbonyl protecting group prepn; amine perfluoro tagged benzyloxycarbonyl protective group; quinazolinedione prepn perfluoro tagged benzyloxycarbonyl protective group; fluorous biphasic system perfluoro tagged protective group
IT Solvents
(perfluorinated; perfluoro-tagged benzyloxycarbonyl protecting group and its application in fluorous biphasic systems)
IT Heterocyclization
Protective groups
(perfluoro-tagged benzyloxycarbonyl protecting group and its application in fluorous biphasic systems)
IT Amines, preparation
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(perfluoro-tagged benzyloxycarbonyl protecting group and its application in fluorous biphasic systems)
IT 75-31-0, Isopropylamine, reactions 89-77-0, 4-Chloroanthranilic acid 118-92-3, Anthranilic acid 333-27-7, Methyl triflate 503-38-8, Trichloromethyl chloroformate 530-62-1, 1,1'-Carbonyldiimidazole 873-75-6, 4-Bromobenzyl alcohol 2043-57-4 3970-21-6 4294-57-9, p-Tolylmagnesium bromide 10025-78-2, Trichlorosilane
RL: RCT (Reactant); RACT (Reactant or reagent)
(perfluoro-tagged benzyloxycarbonyl protecting group and its application in fluorous biphasic systems)
IT 100-46-9P, Benzylamine, preparation 110-89-4P, Piperidine, preparation 459-73-4P, Glycine ethyl ester 617-89-0P, Furfurylamine 13360-63-9P,

Butylethylamine 121392-24-3P 147701-73-3P 201740-57-0P
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(perfluoro-tagged benzyloxycarbonyl protecting group and its application in fluorous biphasic systems)

IT 436855-59-3P 436855-78-6P 436855-81-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(perfluoro-tagged benzyloxycarbonyl protecting group and its application in fluorous biphasic systems)

RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD

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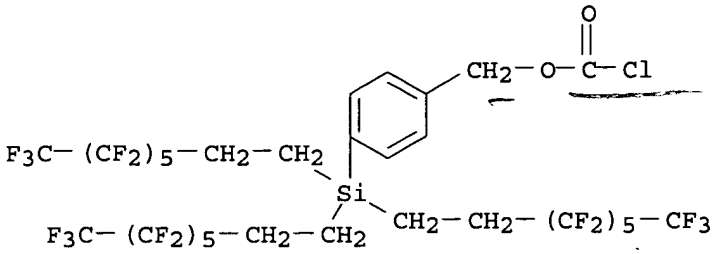
CN Carbonochloridic acid, [4-[tris(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)silyl]phenyl]methyl ester (9CI) (CA INDEX NAME)



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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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STRUCTURE FILE UPDATES:   11 APR 2005  HIGHEST RN 848290-51-7
DICTIONARY FILE UPDATES:  11 APR 2005  HIGHEST RN 848290-51-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

  Please note that search-term pricing does apply when
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* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,   *
* effective March 20, 2005.  A new display format, IDERL, is now    *
* available and contains the CA role and document type information. *
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Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
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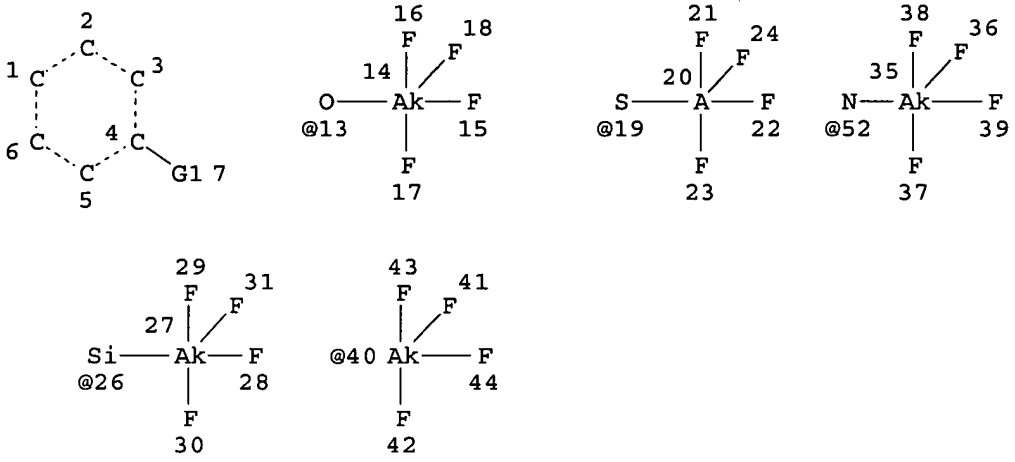

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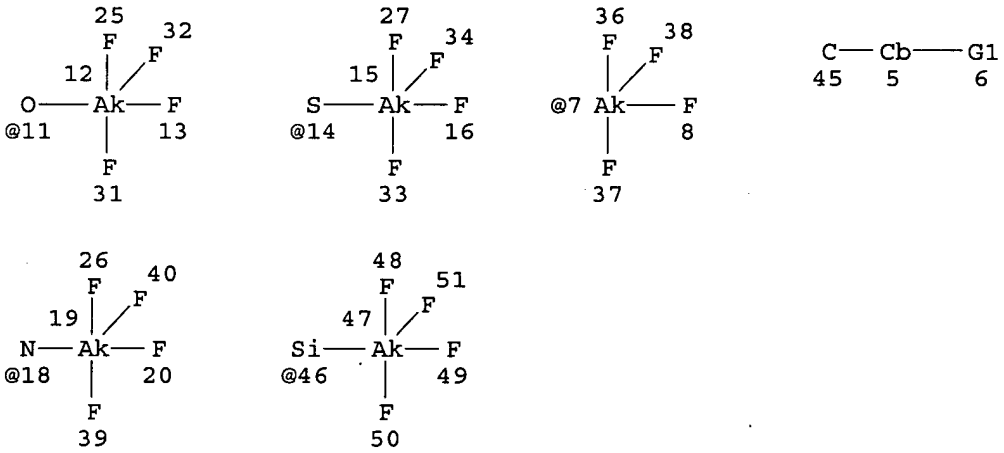

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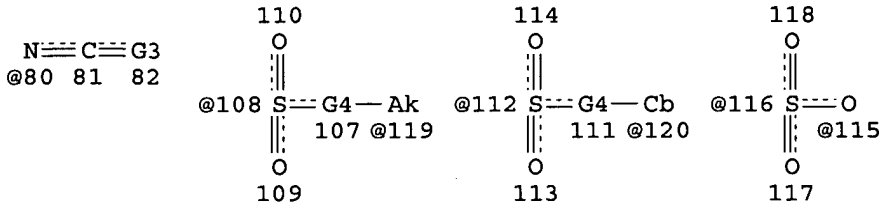

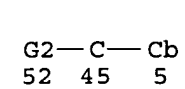

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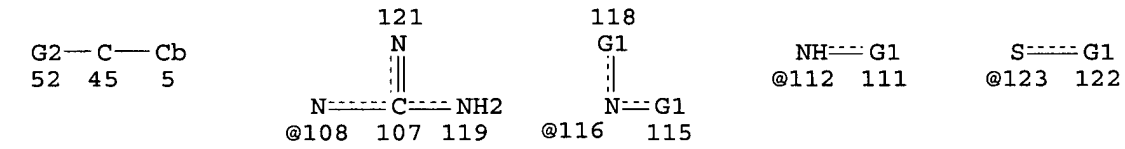

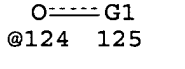

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L10           29 S E15-E18
                 E YU M/AU
L11          207 S E3,E24
                 E YU MARVIN/AU
L12           17 S E3-E5
                 E SUNGWHAN/AU
                 SEL RN L1

     FILE 'REGISTRY' ENTERED AT 06:59:31 ON 12 APR 2005
L13           84 S E1-E84
L14            1 S C22H14F17NO5 AND L13
L15            1 S C18H11F17O2 AND L13
L16            1 S C29H18F17NO5 AND L13
L17            1 S C16H8BRF17 AND L13
L18            2 S C17H10BRF17 AND C6/ES
L19            0 S C27H14CLF17
L20           39 S L13 AND F/ELS
L21           35 S L20 NOT L14-L18
L22           24 S L21 AND F>=4
L23           28 S L14-L17,L22
L24           30 S L18,L23

     FILE 'HCAOLD' ENTERED AT 07:07:43 ON 12 APR 2005
L25            2 S L24

     FILE 'REGISTRY' ENTERED AT 07:08:18 ON 12 APR 2005
L26           22 S L24 AND NR>=1
L27            8 S L24 NOT L26

     FILE 'HCAPLUS' ENTERED AT 07:09:29 ON 12 APR 2005
L28           19 S L26
L29            5 S L28 AND L1-L12
L30            4 S L29 AND (FLUOR?(L)TECH?)/PA,CS
L31            5 S L29,L30
L32           14 S L28 NOT L31
L33           12 S L28 AND (PD<=20020711 OR PRD<=20020711 OR AD<=20020711)
L34            3 S L32 NOT L33

     FILE 'REGISTRY' ENTERED AT 07:12:31 ON 12 APR 2005

     FILE 'HCAPLUS' ENTERED AT 07:12:40 ON 12 APR 2005

     FILE 'REGISTRY' ENTERED AT 07:13:23 ON 12 APR 2005
L35              STR
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                E F/ELS
L36             SCR 1968
L37           50 S L35 AND L36
L38        35612 S L35 AND L36 FUL
                SAV TEMP L38 SHIAO617A/A
L39             STR L35
L40           50 S L39 SAM SUB=L38
L41         7096 S L39 FUL SUB=L38
                SAV TEMP L41 SHIAO617A1/A
L42             STR L39
L43           50 S L42 SAM SUB=L41
L44         4708 S L42 FUL SUB=L41
                SAV TEMP L44 SHIAO617A2/A
L45             STR L42
L46           50 S L45 SAM SUB=L44
L47         3542 S L45 FUL SUB=L44
                SAV TEMP L47 SHIAO617A3/A
L48         3179 S L47 NOT (PMS OR MXS)/CI
L49           72 S L48 AND NC4/ES
L50            6 S L49 AND (C18H14F9NO5 OR C20H14F13NO5 OR C23H14F19NO5 OR C22H1
L51           29 S L48 AND OC4/ES
L52          291 S L48 AND S/ELS NOT L49-L51
L53          289 S L52 NOT (CCS/CI OR SQL/FA)
L54             STR L35
L55            1 S L54 SAM SUB=L48
L56            7 S L54 SAM SUB=L38
L57          130 S L54 FUL SUB=L38
                SAV L57 TEMP SHIAO617A4/A
L58           23 S L57 AND L41
L59            3 S L58 AND (C19H12CLF17O2 OR C18H8CLF17O2 OR C18H10CLF17O2)
L60            9 S L50,L59
                SAV TEMP L60 SHIAO617A5/A
L61            7 S L60 NOT L26

     FILE 'HCAOLD' ENTERED AT 07:55:25 ON 12 APR 2005
L62            0 S L61

     FILE 'HCAPLUS' ENTERED AT 07:55:28 ON 12 APR 2005
L63            6 S L61
L64            1 S L63 AND L1-L12
L65            4 S L63 AND (PD<=20020711 OR PRD<=20020711 OR AD<=20020711)
L66            5 S L64,L65
L67            1 S L63 NOT L66

     FILE 'REGISTRY' ENTERED AT 07:56:30 ON 12 APR 2005

     FILE 'HCAPLUS' ENTERED AT 07:56:48 ON 12 APR 2005

     FILE 'REGISTRY' ENTERED AT 07:57:42 ON 12 APR 2005
L68             STR
L69           50 S L68
L70      2012368 S 46.150.18/RID AND F/ELS
L71           50 S L68 AND L36 SAM SUB=L70
L72             SCR 1044
L73           50 S L68 AND L36 AND L72 SAM SUB=L70
L74        37805 S L68 AND L36 AND L72 FUL SUB=L70
                SAV TEMP L74 SHIAO6A7B/A
L75          905 S L38 AND SI/ELS NOT (PMS OR CCS)/CI
L76             STR L39
L77             STR L76
L78           12 S L77 FUL SUB=L38
L79            3 S L78 AND 1/CL
L80            1 S L79 AND C32H18CLF39O2SI
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     FILE 'HCAPLUS' ENTERED AT 08:08:54 ON 12 APR 2005
L81           2 S L80

     FILE 'REGISTRY' ENTERED AT 08:09:29 ON 12 APR 2005
                SAV L78 SHIAO617A6/A
                DEL SHIAO6A7B/A
                SAV TEMP L74 SHIAO617B/A
L82             STR L45
L83          50 S L82 SAM SUB=L74
L84       16196 S L82 FUL SUB=L74
                SAV TEMP L84 SHIAO617B2/A
L85             STR L82
L86          50 S L85 SAM SUB=L84
L87             STR L85
L88             STR L82
L89       16283 S L88 FUL SUB=L74
                DEL SHIAO617B2/A
                SAV TEMP L89 SHIAO617B2/A
L90          50 S L87 SAM SUB=L89
L91             STR L87
L92          50 S L91 SAM SUB=L89
L93        7961 S L91 FUL SUB=L89
                SAV TEMP L93 SHIAO617B3/A
L94             STR L91
L95          50 S L94 SAM SUB=L89
L96        4820 S L94 FUL SUB=L89
                SAV TEMP L96 SHIAO617B4/A
L97       11342 S L93,L96
L98             STR
L99          50 S L98 SAM SUB=L97
L100      11327 S L98 FUL SUB=L97

     FILE 'HCAPLUS' ENTERED AT 08:40:52 ON 12 APR 2005
L101       2509 S L97
L102          4 S L1-L12 AND L101
                SEL HIT RN

     FILE 'REGISTRY' ENTERED AT 08:41:38 ON 12 APR 2005
L103         63 S E1-E63
L104         58 S L103 NOT L26,L61,L80

     FILE 'HCAPLUS' ENTERED AT 08:42:48 ON 12 APR 2005
L105       2505 S L101 NOT L102
L106       2228 S L105 AND (PD<=20020711 OR PRD<=20020711 OR AD<=20020711)
L107        460 S L106 AND BENZEN?/SC,SX
L108          0 S L107 AND TAGGING
L109          0 S L107 AND TAG?
L110          3 S L107 AND SCAVEN?
                E SCAVEN/CT
                E E19+ALL
L111       6664 S E2+NT
                E HALOALKYLATION/CT
L112        504 S E3-E12
                E E3+ALL
L113        492 S E3+NT
                E COMBINATORIAL/CT
L114      22605 S E7+OLD,NT,PFT,RT
L115      37252 S E5+OLD,NT,PFT,RT
                E E5+ALL
L116      17055 S E6+OLD,NT,PFT,RT
L117         58 S L106 AND L111-L116
L118         39 S L117 AND L107
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L119          48 S L117 AND L112,L113
L120           0 S L119 AND L111
L121           0 S L119 AND L114-L116
L122          19 S L117-L119 AND P/DT
L123          15 S L122 AND L112,L113

     FILE 'REGISTRY' ENTERED AT 08:47:53 ON 12 APR 2005

=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 08:48:07 ON 12 APR 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)
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FILE COVERS 1907 - 12 Apr 2005  VOL 142 ISS 16
FILE LAST UPDATED: 11 Apr 2005  (20050411/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.


=> d l102 bib abs hitstr retable tot

L102 ANSWER 1 OF 4  HCAPLUS  COPYRIGHT 2005 ACS on STN
AN   2004:209841  HCAPLUS
DN   140:218572
TI   Synthesis of trifluorostyrene derivatives as polymer monomers for proton
     exchange resins
IN   Lu, Long; Hu, Liqing; Zhang, Weixing; Wang, Yi; Li, Wei; He, Yan
PA   Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences,
     Peop. Rep. China
SO   Faming Zhuanli Shenqing Gongkai Shuomingshu, 13 pp.
     CODEN: CNXXEV
DT   Patent
LA   Chinese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
     ---------------     ----   --------    --------------------    --------
PI   CN 1349962           A     20020522    CN 2001-132099          20011102
PRAI CN 2001-132099              20011102
OS   MARPAT 140:218572
AB   The title monomers are trifluorostyrene derivs. having meta-C2-6
     perfluoroalkyl or/and meta-(CF2CF)nOCF2CF2SO2F (Rf) (n=1-4) groups and are
     synthesized by steps of (1) coupling iodobenzene with iodofluoroalkane
     derivs. in the presence of Cu at 60-120° for 15-40 h; (2) nitrating
     the intermediate with HNO3/H2SO4 at 30-60° for 15-40 h, (3)
     reducing with SnCl2·2H2O/concentrated HCl at 30-80° for 0.5-2.0 h
     to m-Rf-aminobenzene, (3) diazotizing at -5° for 1.0-5.0 h,
     substituting with KI at 45-75° for 0.5- 2.0 h to obtain
     m-Rf-iodobenzene, and (4) coupling the compound with CF2=CFZnBr in the
     presence of palladium-based catalyst.  The monomers can be used for the
     proton exchange resin for the proton exchange membrane of fuel cells.
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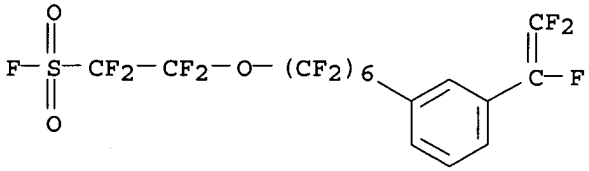
IT **664327-26-8DP**, sulfonated
RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses)
(prepns. of proton exchange resins from trifluorostyrene derivs. bearing meta-perfluoroalkyl substituents)
RN 664327-26-8 HCAPLUS
CN Ethanesulfonyl fluoride, 2-[[1,1,2,2,3,3,4,4,5,5,6,6-dodecafluoro-6-[3-(trifluoroethenyl)phenyl]hexyl]oxy]-1,1,2,2-tetrafluoro-, polymer with (trifluoroethenyl)benzene and 1-(trifluoroethenyl)-3-(trifluoromethyl)benzene (9CI) (CA INDEX NAME)

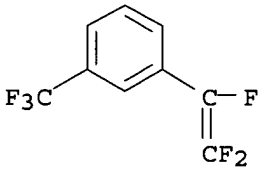
CM 1

CRN 664327-21-3
CMF C16 H4 F20 O3 S



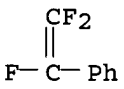
CM 2

CRN 82907-02-6
CMF C9 H4 F6

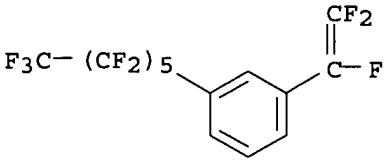


CM 3

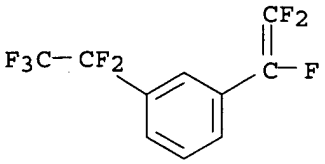
CRN 447-14-3
CMF C8 H5 F3



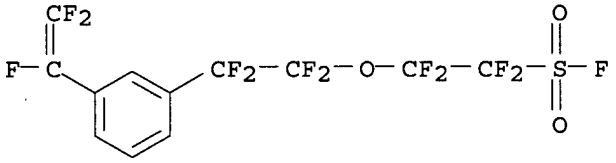
IT **540770-39-6P 664327-20-2P 664327-25-7P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(prepns. of trifluorostyrene derivs. bearing meta-perfluoroalkyl substituents as polymer monomers for proton exchange resins)
RN 540770-39-6 HCAPLUS
CN Benzene, 1-(tridecafluorohexyl)-3-(trifluoroethenyl)- (9CI) (CA INDEX NAME)



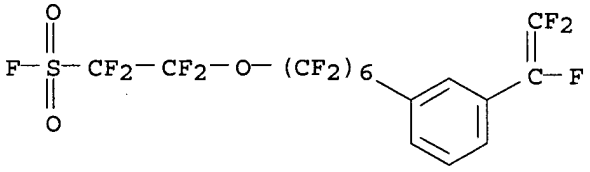
RN 664327-20-2 HCAPLUS
CN Benzene, 1-(pentafluoroethyl)-3-(trifluoroethenyl)- (9CI) (CA INDEX NAME)



RN 664327-25-7 HCAPLUS
CN Ethanesulfonyl fluoride, 1,1,2,2-tetrafluoro-2-[1,1,2,2-tetrafluoro-2-[3-(trifluoroethenyl)phenyl]ethoxy]- (9CI) (CA INDEX NAME)



IT **664327-21-3**
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepns. of trifluorostyrene derivs. bearing meta-perfluoroalkyl substituents as polymer monomers for proton exchange resins)
RN 664327-21-3 HCAPLUS
CN Ethanesulfonyl fluoride, 2-[[1,1,2,2,3,3,4,4,5,5,6,6-dodecafluoro-6-[3-(trifluoroethenyl)phenyl]hexyl]oxy]-1,1,2,2-tetrafluoro- (9CI) (CA INDEX NAME)



L102 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:60433 HCAPLUS
DN 140:128148
TI A method for preparing new fluorous tagging and scavenging reactants and uses thereof
IN **Zhang, Wei; Luo, Zhiyong; Nagashima, Tadamichi ; Chen, Christine Hiu-Tung; Yu, Marvin S.**
PA **Fluorous Technologies Incorporated, USA**
SO PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DT Patent

LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004007407	A2	20040122	WO 2003-US21686	20030711 <--
	WO 2004007407	A3	20041125		
	W: CA, JP				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
	US 2004073054	A1	20040415	US 2003-617431	20030711 <--
PRAI	US 2002-395067P	P	20020711	<--	
	US 2002-396952P	P	20020718		
	US 2003-442712P	P	20030127		
	US 2003-442762P	P	20030127		
	US 2003-442840P	P	20030127		

OS MARPAT 140:128148
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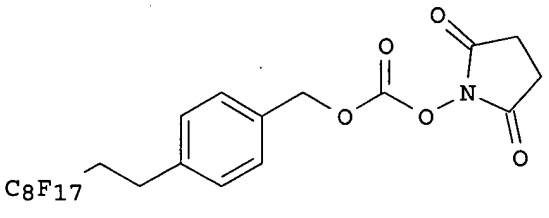


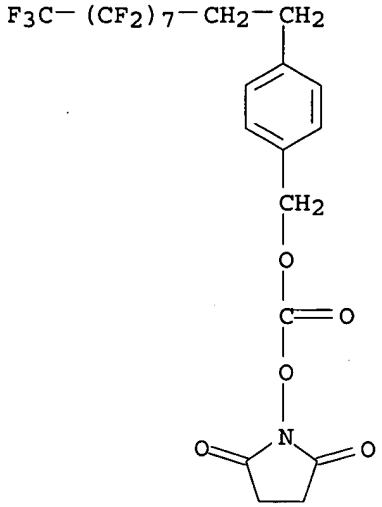
I

AB The present invention includes methods and compns. for increasing the fluorous nature of an organic compound, which contains at least one functional group reactive with group X, by reacting it with at least one fluorous compound of formula XCR1R2(C6H5)m[Wp(CH2)nRf]m [wherein X = a leaving group, a nucleophilic group, or an electrophilic group; R1 and R2 = independently H, alkyl, Ph, (C6R5)q(W')q, or (C6H5)m'[Wp'(CH2)n'Rf]m'; m and m' = independently 1-5; n and n' = independently 0-5; p and p' = independently 0 or 1; q = 0-5; W = O, S, NR3, CR4R5, SIR6R7; W' = OR8, SR9, NR10R11, CR12R13R14, or SiR15R16R17; R3, R4, R5, R8-R14 = independently H, alkyl, aryl, benzyl, or (CH2)n''Rf; R6, R7, R15-R17 = independently alkyl, aryl, benzyl, or (CH2)n''Rf; n'' = 0-5; Rf = perfluoroalkyl, a fluorinated either, or a fluorinate amine; with provisos] to produce a fluorous tagged organic compound The increased fluorous nature of the fluorous tagged organic compound may then be used to sep. the fluorous organic compound from untagged reagents, reactants, catalysts, and/or products derived from it. The resultant fluorous tagged organic compound may also be subjected to subsequent chemical transformations, wherein the fluorous nature of the tagged compound is used to increase the ease of separation of the fluorous tagged organic compound from untagged reagents, reactants, catalysts, and/or products derived therefrom, after each chemical transformation. The chemical transformations result in a second fluorous tagged organic compound, which may be reduced by removing the fluorous group thereby producing a second organic compound The second organic compound may be employed as a pharmaceutical compound or intermediate or as a combinatorial library component. For example, reaction of 4-(1H,1H,2H,2H-perfluorodecyl)benzyl alc. with phosgene in anhydrous THF, followed by coupling with N-hydroxysuccinimide dicyclohexylamine salt in chloroform and workup, provided I (82%).

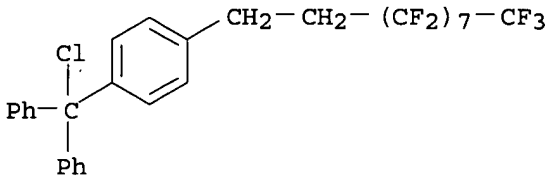
IT **556050-49-8P 649561-67-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(fluorous tagging and scavenging compound; preparation of new fluorous tagging and scavenging reactants and uses thereof)

RN 556050-49-8 HCAPLUS

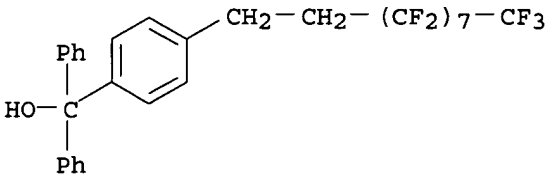
CN 2,5-Pyrrolidinedione, 1-[[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methoxy]carbonyl]oxy]- (9CI) (CA INDEX NAME)



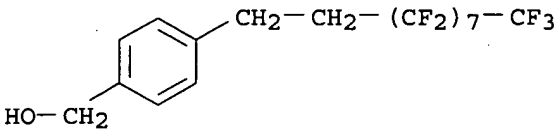
RN 649561-67-1 HCAPLUS
CN Benzene, 1-(chlorodiphenylmethyl)-4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)- (9CI) (CA INDEX NAME)



IT **649561-66-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of new fluorous tagging and scavenging reactants and uses thereof)
RN 649561-66-0 HCAPLUS
CN Benzenemethanol, 4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)-α,α-diphenyl- (9CI) (CA INDEX NAME)



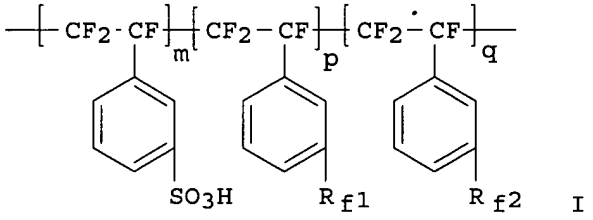
IT **356055-77-1**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of new fluorous tagging and scavenging reactants and uses thereof)
RN 356055-77-1 HCAPLUS
CN Benzenemethanol, 4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)- (9CI) (CA INDEX NAME)



L102 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:501591 HCAPLUS
DN 139:37548
TI Preparation of proton exchange fluoropolymers of trifluorostyrenes and application thereof
IN Lu, Long; Hu, Liqing; **Zhang, Weixing**; Li, Wei; He, Yan; Wang, Yi
PA Shanghai Inst. of Organic Chemistry, Chinese Academy of Sciences, Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 15 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1346707	A	20020501	CN 2001-132100	20011102
	CN 1128679	B	20031126		
PRAI	CN 2001-132100		20011102		

GI



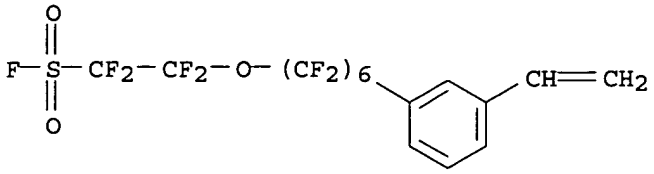
I

AB The fluoropolymers of trifluorostyrenes (the structural formula I, in which Rf1 is H or CyF2y+1, Rf2 is (CF2CF2)nOCF2CF2SO3H, y = 1, 2, 3, 4, 5 or 6, n = 1, 2, 3 or 4, and m:p:q = 39.2-7.2:9.8-1.8:1) useful for preparing proton exchange membrane in fuel cell had a numeric mol. weight 20- 200 x 104, a dispersion coefficient 1.5-4.5, and an ion exchange capacity 1.5-3.5 mmol HSO4+/g (resin). The synthesizing process comprises (I) radical polymerizing of PhCF=CF2, Rf1PhCF=CF2 and Rf2PhCF=CF2 at a mole ratio of 39.2-7.2:9.8-1.8:1 at 30-70° for 40-100 h in the presences of an initiator (such as K2S2O8) and an emulsifying agent (such as n-C12H25NH2Cl), (II) dissolving the obtained polymer in dichloromethane, and allowing the polymer to sulfonate with a sulfonating agent (a mixture of tri-Et phosphate, SO3 and dichloromethane) at 30-60° for 30 min-1.5 h, hydrolyzing of the sulfonated polymer in an 10-50% aqueous solution of a monobasic metal hydroxide at 60-80° for 4-8 h to obtain a monobasic metal ion exchange resin, and (IV) H+ exchanging of the ion exchange resin with a 0.5-10 mol/L H2SO4 solution for 15-30 min to obtain the product.

IT **540770-35-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(in preparation of proton exchange fluoropolymers of trifluorostyrenes and application thereof)

RN 540770-35-2 HCAPLUS

CN Ethanesulfonyl fluoride, 2-[[6-(3-ethenylphenyl)-1,1,2,2,3,3,4,4,5,5,6,6-dodecafluorohexyl]oxy]-1,1,2,2-tetrafluoro- (9CI) (CA INDEX NAME)



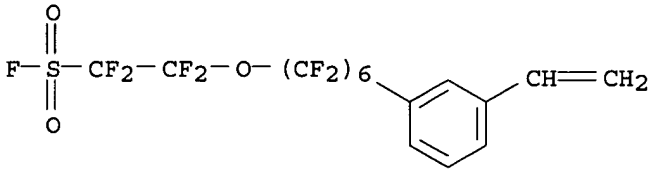
IT **540770-36-3P 540770-38-5P 540770-40-9P**
540770-41-0P
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of proton exchange fluoropolymers of trifluorostyrenes and application thereof)

RN 540770-36-3 HCAPLUS

CN Ethanesulfonyl fluoride, 2-[[6-(3-ethenylphenyl)-1,1,2,2,3,3,4,4,5,5,6,6-dodecafluorohexyl]oxy]-1,1,2,2-tetrafluoro-, polymer with (trifluoroethenyl)benzene and 1-(trifluoroethenyl)-3-(trifluoromethyl)benzene (9CI) (CA INDEX NAME)

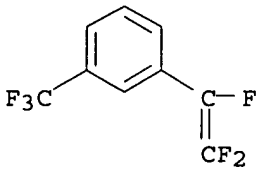
CM 1

CRN 540770-35-2
CMF C16 H7 F17 O3 S



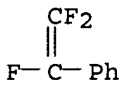
CM 2

CRN 82907-02-6
CMF C9 H4 F6



CM 3

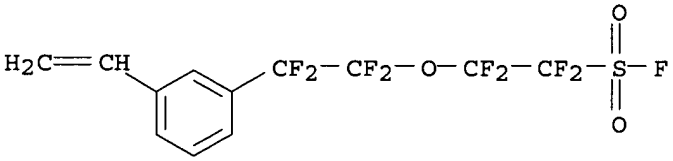
CRN 447-14-3
CMF C8 H5 F3



RN 540770-38-5 HCAPLUS
CN Ethanesulfonyl fluoride, 2-[2-(3-ethenylphenyl)-1,1,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoro-, polymer with (trifluoroethenyl)benzene and 1-(trifluoroethenyl)-3-(trifluoromethyl)benzene (9CI) (CA INDEX NAME)

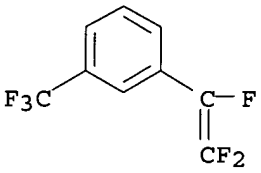
CM 1

CRN 540770-37-4
CMF C12 H7 F9 O3 S



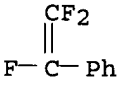
CM 2

CRN 82907-02-6
CMF C9 H4 F6



CM 3

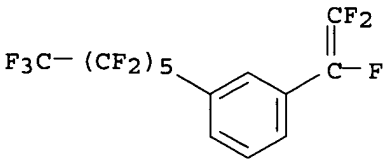
CRN 447-14-3
CMF C8 H5 F3



RN 540770-40-9 HCAPLUS
CN Ethanesulfonyl fluoride, 2-[[6-(3-ethenylphenyl)-1,1,2,2,3,3,4,4,5,5,6,6-dodecafluorohexyl]oxy]-1,1,2,2-tetrafluoro-, polymer with 1-(tridecafluorohexyl)-3-(trifluoroethenyl)benzene and (trifluoroethenyl)benzene (9CI) (CA INDEX NAME)

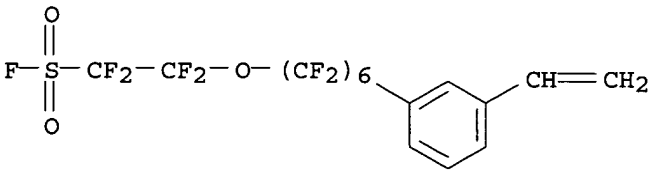
CM 1

CRN 540770-39-6
CMF C14 H4 F16



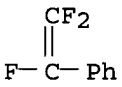
CM 2

CRN 540770-35-2
CMF C16 H7 F17 O3 S



CM 3

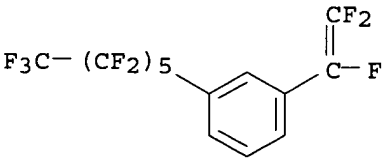
CRN 447-14-3
CMF C8 H5 F3



RN 540770-41-0 HCAPLUS
CN Ethanesulfonyl fluoride, 2-[2-(3-ethenylphenyl)-1,1,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoro-, polymer with 1-(tridecafluorohexyl)-3-(trifluoroethenyl)benzene and (trifluoroethenyl)benzene (9CI) (CA INDEX NAME)

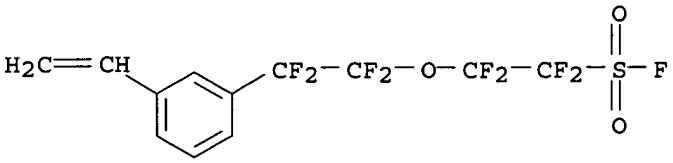
CM 1

CRN 540770-39-6
CMF C14 H4 F16



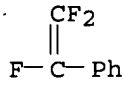
CM 2

CRN 540770-37-4
CMF C12 H7 F9 O3 S



CM 3

CRN 447-14-3
CMF C8 H5 F3

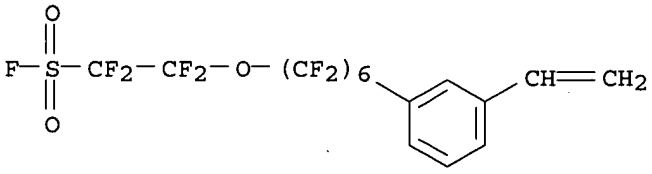


IT **540770-36-3DP**, sulfonated product **540770-38-5DP**, sulfonated product **540770-40-9DP**, sulfonated product **540770-41-0DP**, sulfonated product
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation of proton exchange fluoropolymers of trifluorostyrenes and application thereof)

RN 540770-36-3 HCAPLUS
CN Ethanesulfonyl fluoride, 2-[[6-(3-ethenylphenyl)-1,1,2,2,3,3,4,4,5,5,6,6-dodecafluorohexyl]oxy]-1,1,2,2-tetrafluoro-, polymer with (trifluoroethenyl)benzene and 1-(trifluoroethenyl)-3-(trifluoromethyl)benzene (9CI) (CA INDEX NAME)

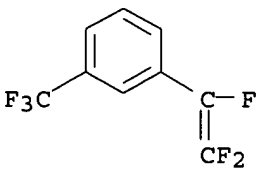
CM 1

CRN 540770-35-2
CMF C16 H7 F17 O3 S



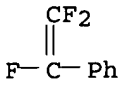
CM 2

CRN 82907-02-6
CMF C9 H4 F6



CM 3

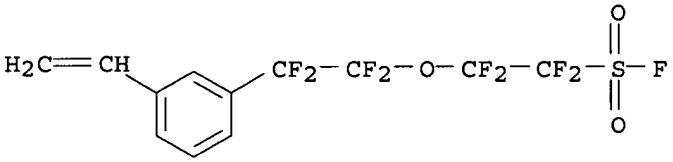
CRN 447-14-3
CMF C8 H5 F3



RN 540770-38-5 HCAPLUS
CN Ethanesulfonyl fluoride, 2-[2-(3-ethenylphenyl)-1,1,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoro-, polymer with (trifluoroethenyl)benzene and 1-(trifluoroethenyl)-3-(trifluoromethyl)benzene (9CI) (CA INDEX NAME)

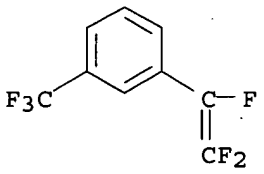
CM 1

CRN 540770-37-4
CMF C12 H7 F9 O3 S



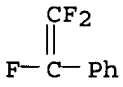
CM 2

CRN 82907-02-6
CMF C9 H4 F6



CM 3

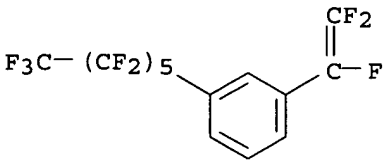
CRN 447-14-3
CMF C8 H5 F3



RN 540770-40-9 HCAPLUS
CN Ethanesulfonyl fluoride, 2-[[6-(3-ethenylphenyl)-1,1,2,2,3,3,4,4,5,5,6,6-dodecafluorohexyl]oxy]-1,1,2,2-tetrafluoro-, polymer with 1-(tridecafluorohexyl)-3-(trifluoroethenyl)benzene and (trifluoroethenyl)benzene (9CI) (CA INDEX NAME)

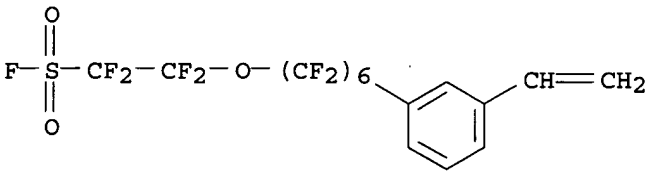
CM 1

CRN 540770-39-6
CMF C14 H4 F16



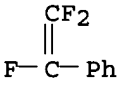
CM 2

CRN 540770-35-2
CMF C16 H7 F17 O3 S



CM 3

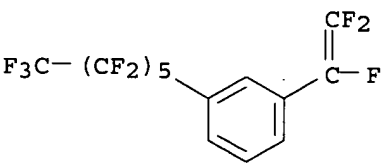
CRN 447-14-3
CMF C8 H5 F3



RN 540770-41-0 HCAPLUS
CN Ethanesulfonyl fluoride, 2-[2-(3-ethenylphenyl)-1,1,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoro-, polymer with 1-(tridecafluorohexyl)-3-(trifluoroethenyl)benzene and (trifluoroethenyl)benzene (9CI) (CA INDEX NAME)

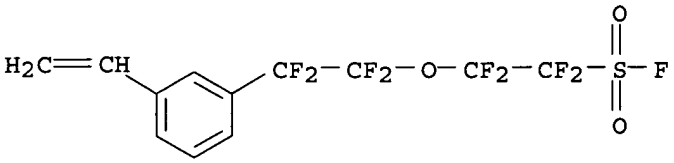
CM 1

CRN 540770-39-6
CMF C14 H4 F16



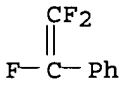
CM 2

CRN 540770-37-4
CMF C12 H7 F9 O3 S

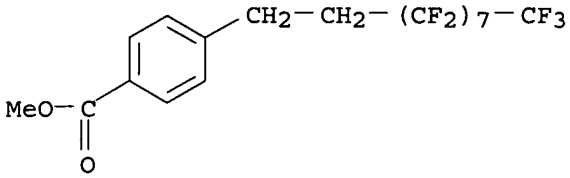


CM 3

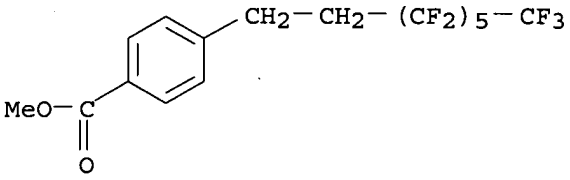
CRN 447-14-3
CMF C8 H5 F3



L102 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:381316 HCAPLUS
DN 139:85611
TI Synthesis and Reactions of Fluorous Carbobenzyloxy (FCbz) Derivatives of α-Amino Acids
AU Curran, Dennis P.; Amatore, Muriel; Guthrie, David; Campbell, Matthew; Go, Eisan; **Luo, Zhiyong**
CS Department of Chemistry, University of Pittsburgh, Pittsburgh, PA, 15260, USA
SO Journal of Organic Chemistry (2003), 68(12), 4643-4647
CODEN: JOCEAH; ISSN: 0022-3263
PB American Chemical Society
DT Journal
LA English
OS CASREACT 139:85611
AB Fluorous carbobenzyloxy (FCbz) reagents Rf(CH2)2-4-C6H4CH2OC(O)OSu (where Su is succinimidoyl and Rf is C6F13 and C8F17) have been used to make FCbz derivs. of 18 of the 20 natural amino acids. The potential utility of this new family of reagents in both standard fluorous synthesis with spe separation and fluorous quasiracemic synthesis is illustrated with representative reactions of the FCbz-Phe derivs.
IT **495388-45-9 556050-47-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation and use of fluorous carbobenzyloxy reagents for use in amino acid chemical)
RN 495388-45-9 HCAPLUS
CN Benzoic acid, 4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)-, methyl ester (9CI) (CA INDEX NAME)

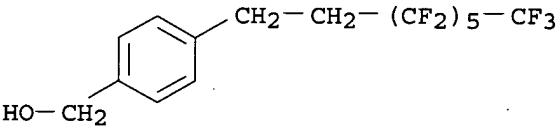


RN 556050-47-6 HCAPLUS
CN Benzoic acid, 4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)-, methyl ester (9CI) (CA INDEX NAME)

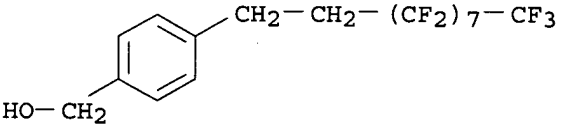


IT **356055-76-0P 356055-77-1P 556050-48-7P**
556050-49-8P 556050-59-0P 556050-78-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and use of fluorous carbobenzyloxy reagents for use in amino acid chemical)

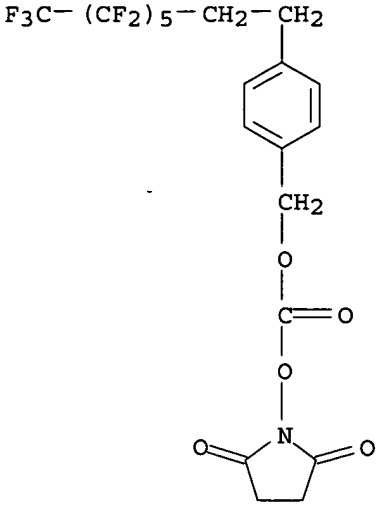
RN 356055-76-0 HCAPLUS
CN Benzenemethanol, 4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)- (9CI) (CA INDEX NAME)



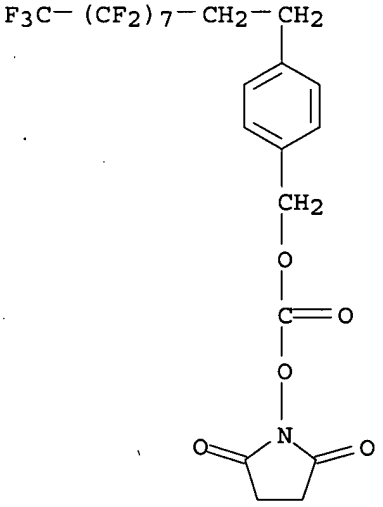
RN 356055-77-1 HCAPLUS
CN Benzenemethanol, 4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)- (9CI) (CA INDEX NAME)



RN 556050-48-7 HCAPLUS
CN 2,5-Pyrrolidinedione, 1-[[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)phenyl]methoxy]carbonyl]oxy]- (9CI) (CA INDEX NAME)

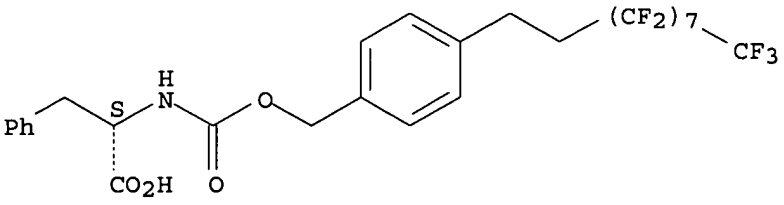


RN 556050-49-8 HCAPLUS
CN 2,5-Pyrrolidinedione, 1-[[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methoxy]carbonyl]oxy]- (9CI) (CA INDEX NAME)



RN 556050-59-0 HCAPLUS
CN L-Phenylalanine, N-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

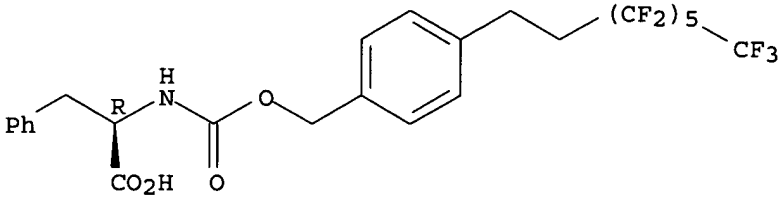
Absolute stereochemistry.



RN 556050-78-3 HCAPLUS
CN D-Phenylalanine, N-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,8-

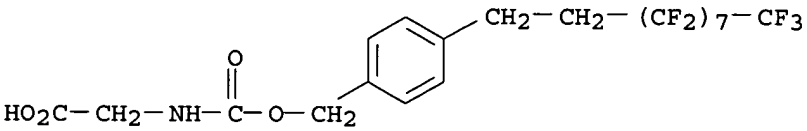
tridecafluorooctyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



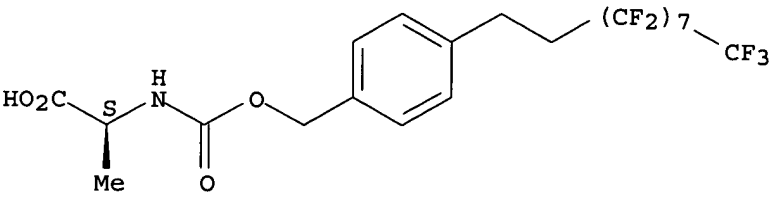
IT **556050-50-1P 556050-51-2P 556050-52-3P**
556050-54-5P 556050-56-7P 556050-58-9P
556050-61-4P 556050-62-5P 556050-64-7P
556050-66-9P 556050-67-0P 556050-68-1P
556050-69-2P 556050-70-5P 556050-71-6P
556050-72-7P 556050-73-8P 556050-74-9P
556050-75-0P 556050-76-1P 556050-77-2P
556050-79-4P 556050-80-7P 556050-81-8P
556050-82-9P 556050-83-0P 556050-84-1P
556050-85-2P 556050-86-3P 556050-87-4P
556050-88-5P 556050-89-6P 556050-90-9P
556050-91-0P 556050-92-1P 556050-93-2P
556050-94-3P 556050-95-4P 556050-96-5P
556050-97-6P 556050-98-7P 556050-99-8P
556051-00-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and use of fluorous carbobenzyloxy reagents for use in amino acid chemical)

RN 556050-50-1 HCAPLUS
CN Glycine, N-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)



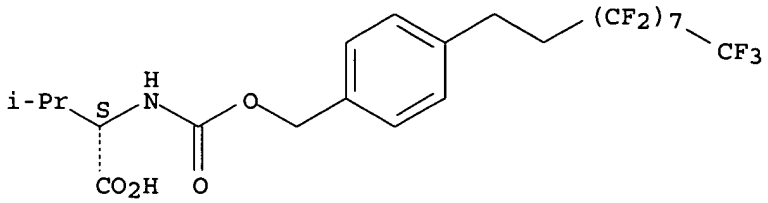
RN 556050-51-2 HCAPLUS
CN L-Alanine, N-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



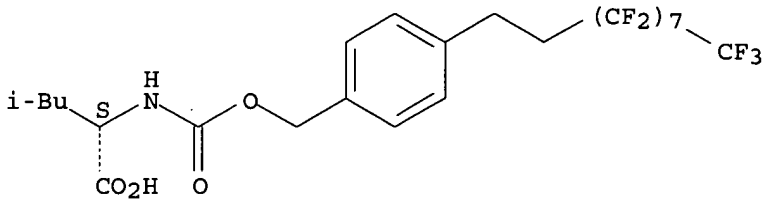
RN 556050-52-3 HCAPLUS
CN L-Valine, N-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



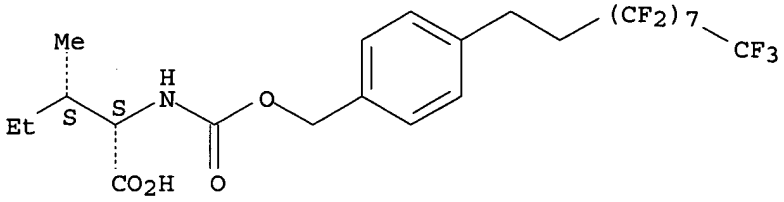
RN 556050-54-5 HCAPLUS
CN L-Leucine, N-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



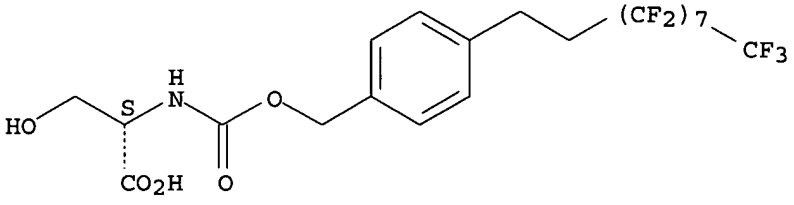
RN 556050-56-7 HCAPLUS
CN L-Isoleucine, N-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



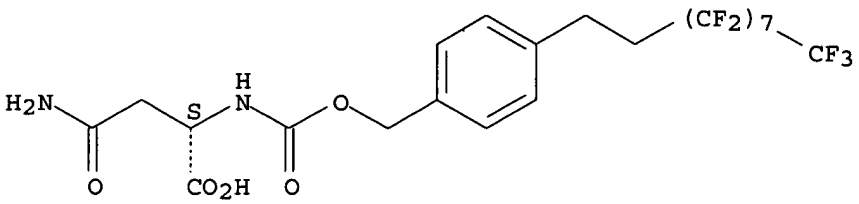
RN 556050-58-9 HCAPLUS
CN L-Serine, N-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



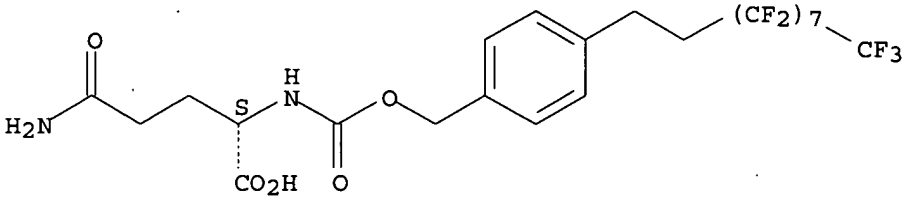
RN 556050-61-4 HCAPLUS
CN L-Asparagine, N2-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



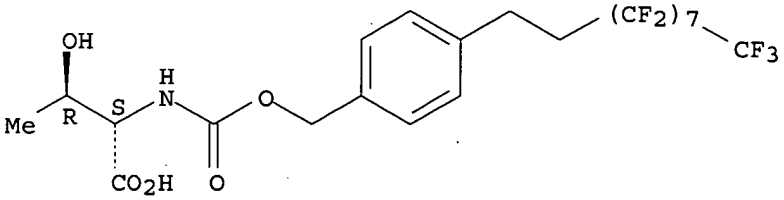
RN 556050-62-5 HCAPLUS
CN L-Glutamine, N2-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



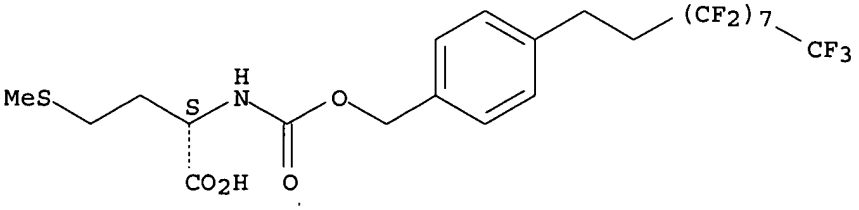
RN 556050-64-7 HCAPLUS
CN L-Threonine, N-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



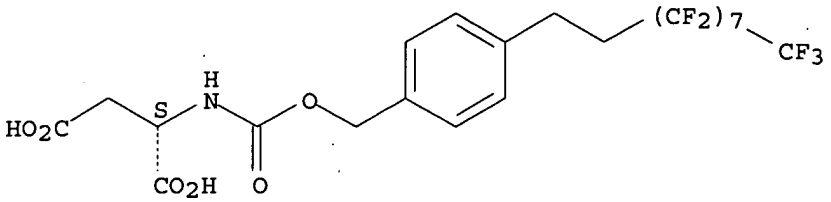
RN 556050-66-9 HCAPLUS
CN L-Methionine, N-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



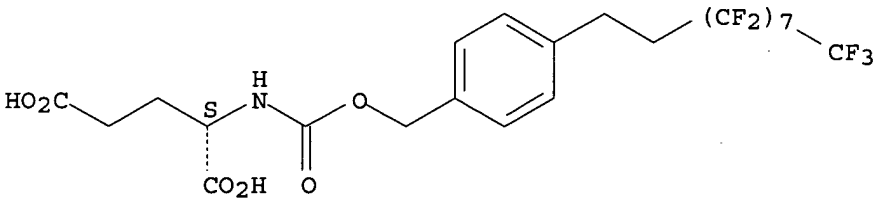
RN 556050-67-0 HCAPLUS
CN L-Aspartic acid, N-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



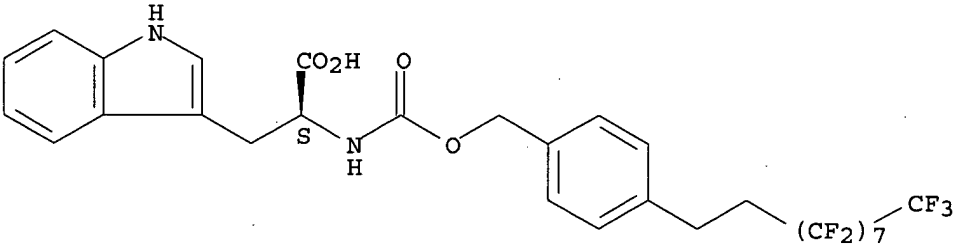
RN 556050-68-1 HCAPLUS
CN L-Glutamic acid, N-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



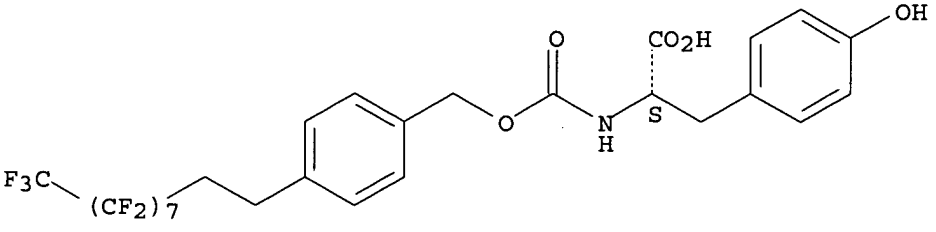
RN 556050-69-2 HCAPLUS
CN L-Tryptophan, N-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



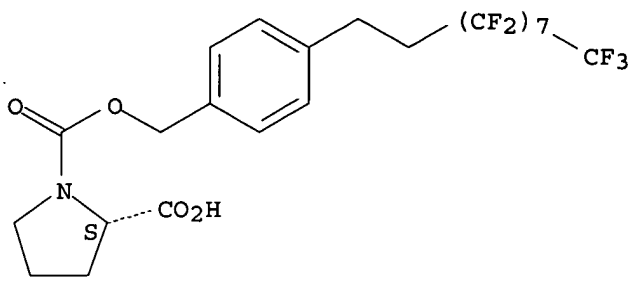
RN 556050-70-5 HCAPLUS
CN L-Tyrosine, N-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

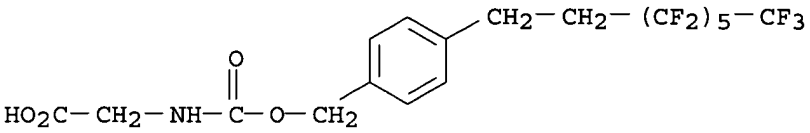


RN 556050-71-6 HCAPLUS
CN 1,2-Pyrrolidinedicarboxylic acid, 1-[[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methyl] ester, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

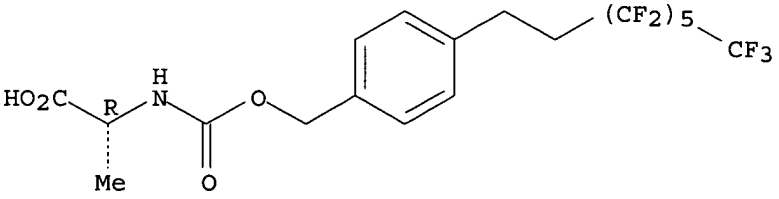


RN 556050-72-7 HCAPLUS
CN Glycine, N-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)



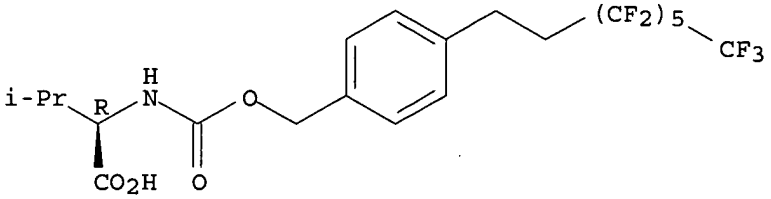
RN 556050-73-8 HCAPLUS
CN D-Alanine, N-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



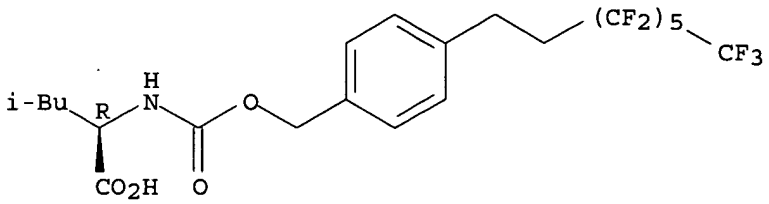
RN 556050-74-9 HCAPLUS
CN D-Valine, N-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



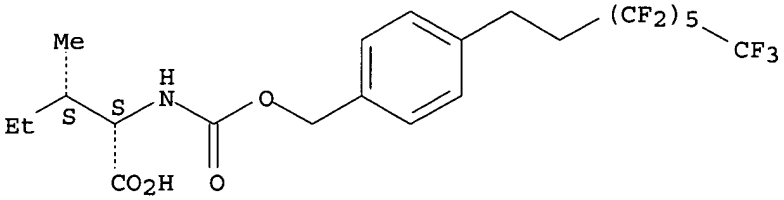
RN 556050-75-0 HCAPLUS
CN D-Leucine, N-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



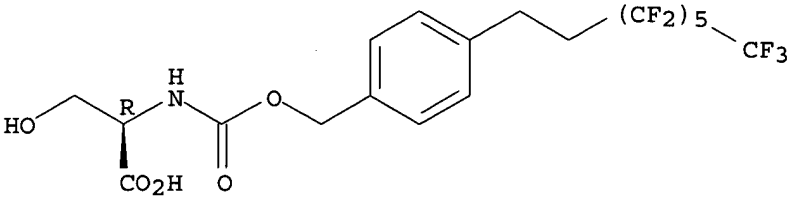
RN 556050-76-1 HCAPLUS
CN L-Isoleucine, N-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



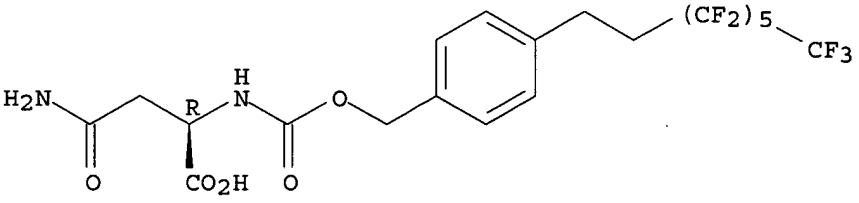
RN 556050-77-2 HCAPLUS
CN D-Serine, N-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



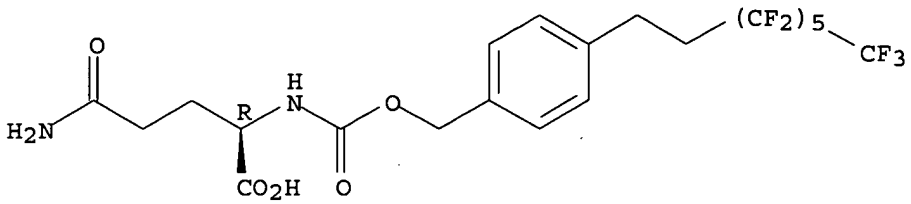
RN 556050-79-4 HCAPLUS
CN D-Asparagine, N2-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



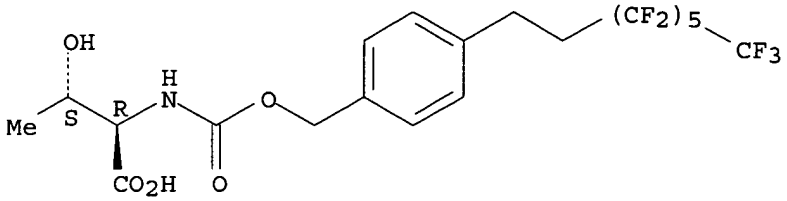
RN 556050-80-7 HCAPLUS
CN D-Glutamine, N2-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



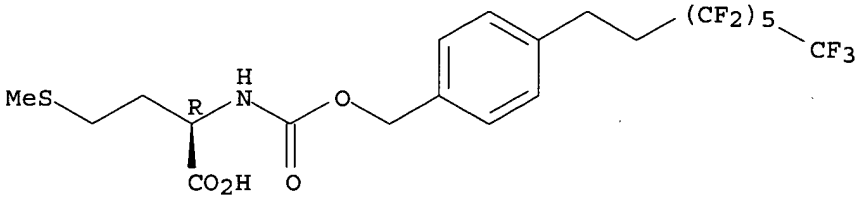
RN 556050-81-8 HCAPLUS
CN D-Threonine, N-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



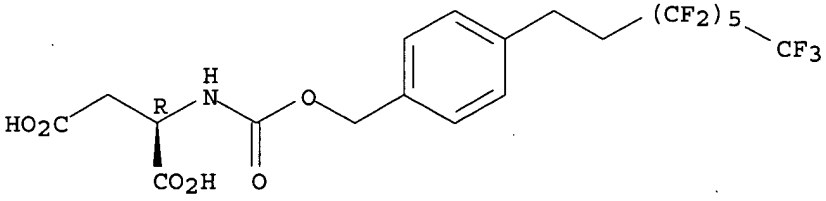
RN 556050-82-9 HCAPLUS
CN D-Methionine, N-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



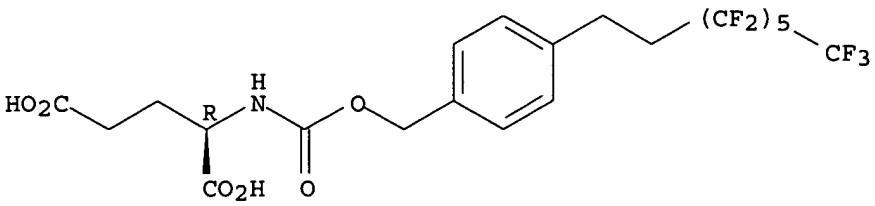
RN 556050-83-0 HCAPLUS
CN D-Aspartic acid, N-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



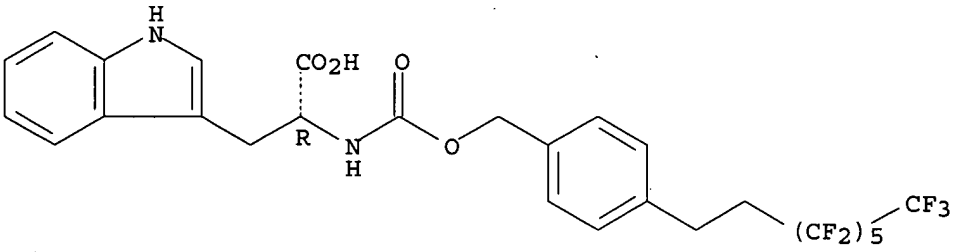
RN 556050-84-1 HCAPLUS
CN D-Glutamic acid, N-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



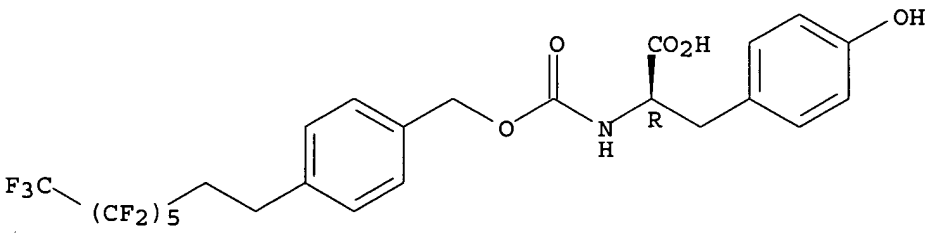
RN 556050-85-2 HCAPLUS
CN D-Tryptophan, N-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



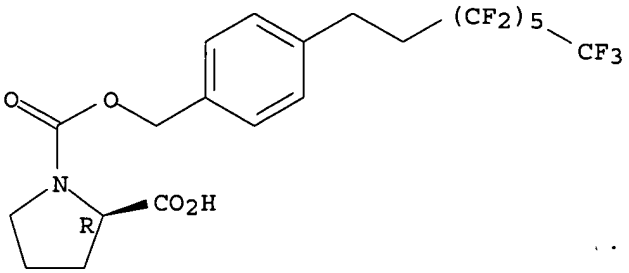
RN 556050-86-3 HCAPLUS
CN D-Tyrosine, N-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 556050-87-4 HCAPLUS
CN 1,2-Pyrrolidinedicarboxylic acid, 1-[[4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)phenyl]methyl] ester, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 556050-88-5 HCAPLUS
CN L-Cystine, N,N'-bis[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-

heptadecafluorodecyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

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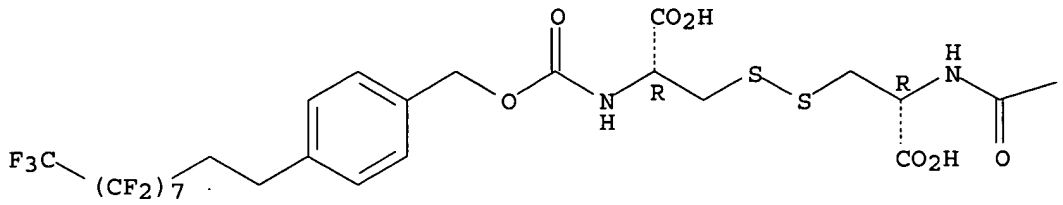

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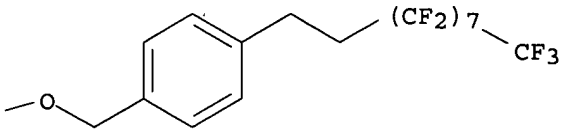
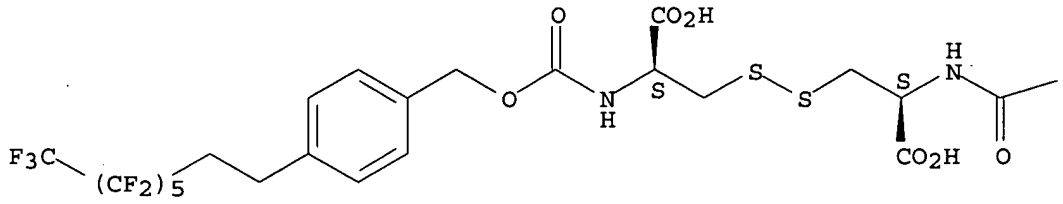


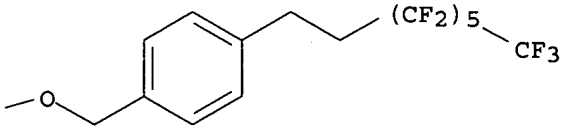
RN 556050-89-6 HCAPLUS
CN D-Cystine, N,N'-bis[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

PAGE 1-A

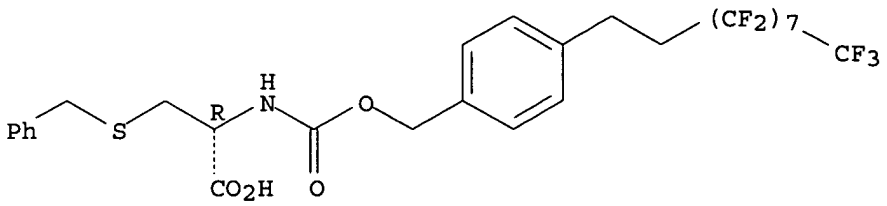


PAGE 1-B



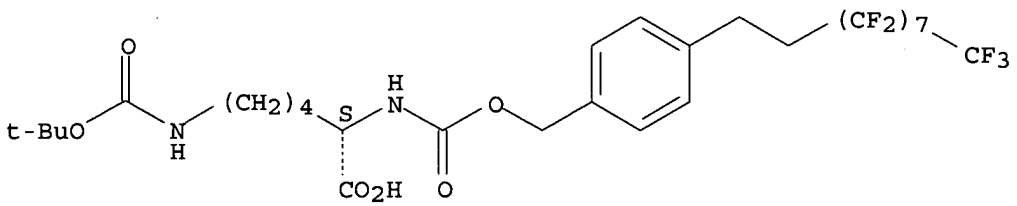
RN 556050-90-9 HCAPLUS
CN L-Cysteine, N-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methoxy]carbonyl]-S-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



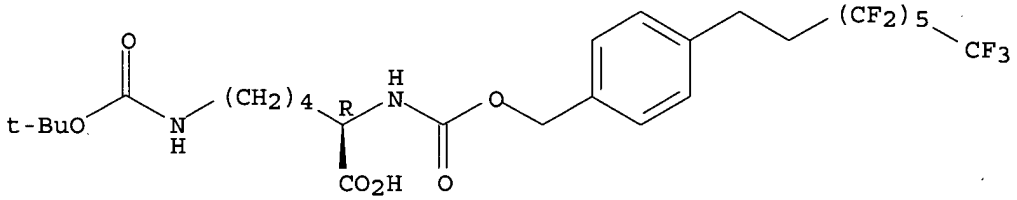
RN 556050-91-0 HCAPLUS
CN L-Lysine, N6-[(1,1-dimethylethoxy)carbonyl]-N2-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



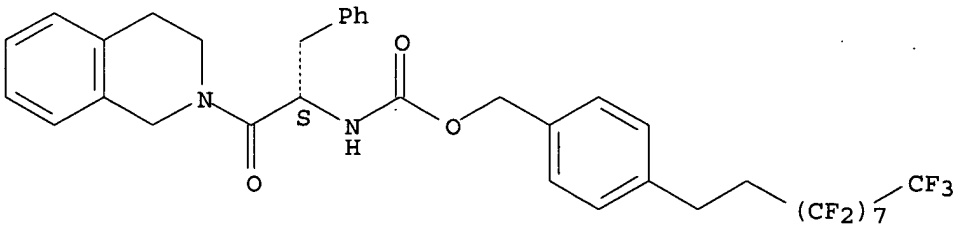
RN 556050-92-1 HCAPLUS
CN D-Lysine, N6-[(1,1-dimethylethoxy)carbonyl]-N2-[[[4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



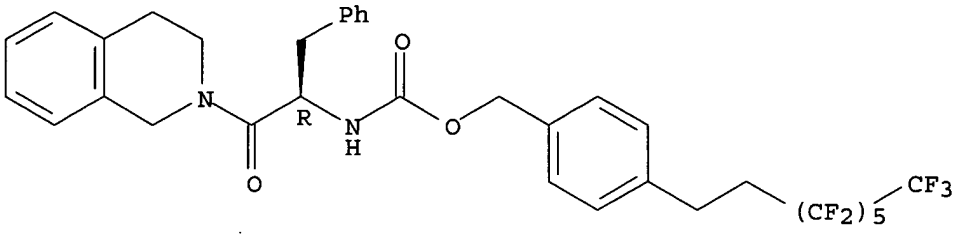
RN 556050-93-2 HCAPLUS
CN Carbamic acid, [(1S)-2-(3,4-dihydro-2(1H)-isoquinolinyl)-2-oxo-1-(phenylmethyl)ethyl]-, [4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



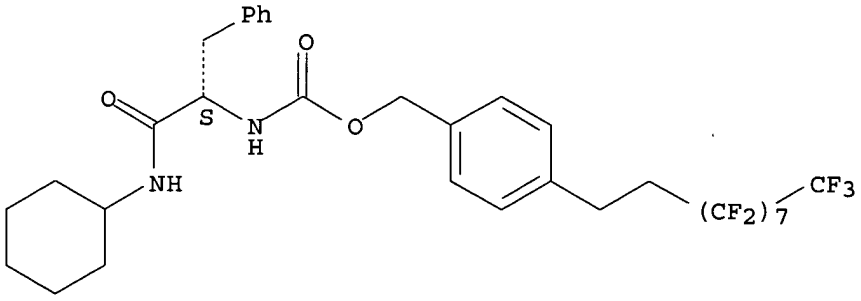
RN 556050-94-3 HCAPLUS
CN Carbamic acid, [(1R)-2-(3,4-dihydro-2(1H)-isoquinolinyl)-2-oxo-1-(phenylmethyl)ethyl]-, [4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)phenyl]methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



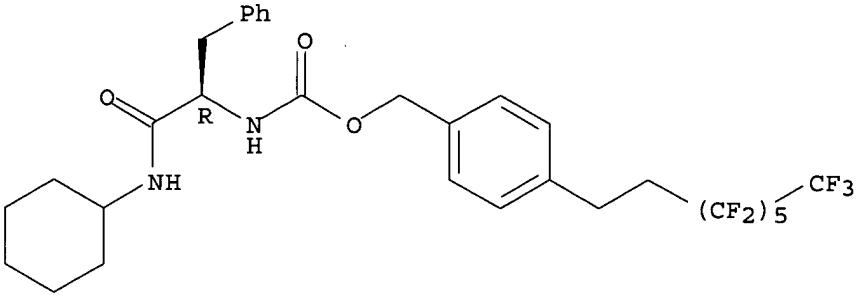
RN 556050-95-4 HCAPLUS
CN Carbamic acid, [(1S)-2-(cyclohexylamino)-2-oxo-1-(phenylmethyl)ethyl]-, [4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



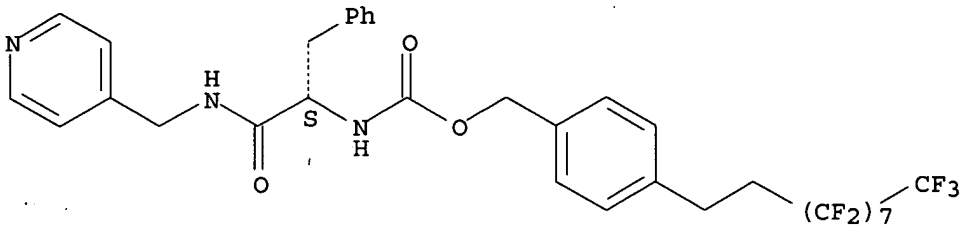
RN 556050-96-5 HCAPLUS
CN Carbamic acid, [(1R)-2-(cyclohexylamino)-2-oxo-1-(phenylmethyl)ethyl]-, [4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)phenyl]methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



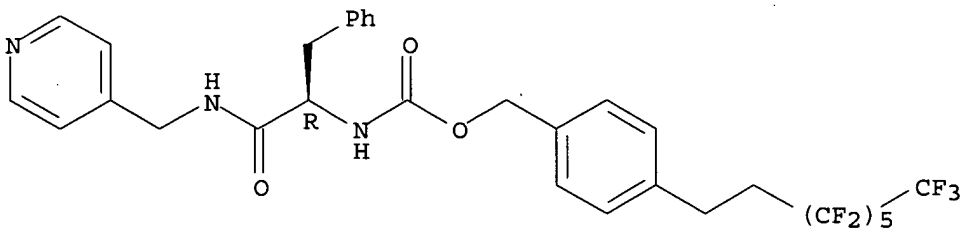
RN 556050-97-6 HCAPLUS
CN Carbamic acid, [(1S)-2-oxo-1-(phenylmethyl)-2-[(4-pyridinylmethyl)amino]ethyl]-, [4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



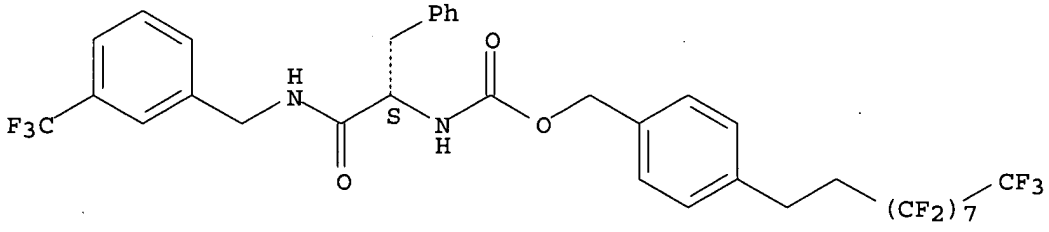
RN 556050-98-7 HCAPLUS
CN Carbamic acid, [(1R)-2-oxo-1-(phenylmethyl)-2-[(4-pyridinylmethyl)amino]ethyl]-, [4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)phenyl]methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



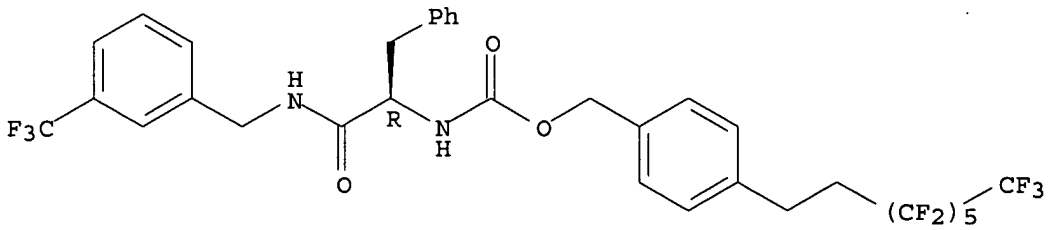
RN 556050-99-8 HCAPLUS
CN Carbamic acid, [(1S)-2-oxo-1-(phenylmethyl)-2-[[[3-(trifluoromethyl)phenyl]methyl]amino]ethyl]-, [4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 556051-00-4 HCAPLUS
CN Carbamic acid, [(1R)-2-oxo-1-(phenylmethyl)-2-[[[3-(trifluoromethyl)phenyl]methyl]amino]ethyl]-, [4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)phenyl]methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RETABLE

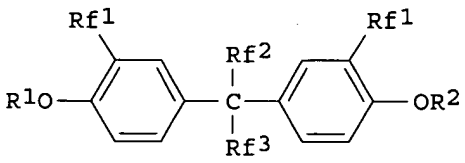
Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon				www.fluorous.com	
Curran, D	1998	37	1175	Angew Chem, Int Ed E	HCAPLUS
Curran, D	1999	121	9069	J Am Chem Soc	HCAPLUS
Curran, D	2000			Stimulating Concepts	
Curran, D	2001		1488	Synlett	HCAPLUS
Curran, D	2001	57	5243	Tetrahedron	HCAPLUS
Filippov, D	2002	43	7809	Tetrahedron Lett	HCAPLUS
Green, T	1999		531	Protective Groups in	
Luo, Z	2001	66	4261	J Org Chem	HCAPLUS
Luo, Z	2001	291	1766	Science	HCAPLUS
Rover, S	1999	40	5667	Tetrahedron Lett	HCAPLUS
Studer, A	1997	275	823	Science	HCAPLUS
Wipf, P	1999	40	4649	Tetrahedron Lett	HCAPLUS
Wipf, P	1999	40	5139	Tetrahedron Lett	HCAPLUS
Zhang, Q	2002	124	5774	J Am Chem Soc	HCAPLUS
Zhang, W	2002	124	10443	J Am Chem Soc	HCAPLUS

=> => d l123 bib abs hitstr retable tot

L123 ANSWER 1 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:115092 HCAPLUS
DN 134:147996
TI Bis(4-hydroxy-3-perfluoroalkylphenyl)fluoroalkane derivatives and process for the preparation thereof
IN Adachi, Kenji; Ishihara, Sumi; Oishi, Satoshi; Moriya, Tsukasa
PA Daikin Industries, Ltd., Japan
SO PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001010805	A1	20010215	WO 2000-JP4866	20000721 <--
	W: US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	JP 2001048820	A2	20010220	JP 1999-220508	19990803 <--
PRAI	JP 1999-220508	A	19990803	<--	

OS MARPAT 134:147996
GI



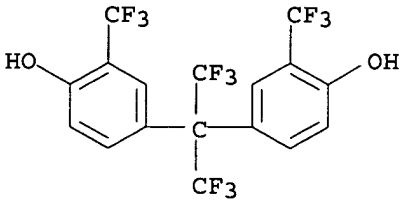
I

AB Bis(4-hydroxy-3-perfluoroalkylphenyl)fluoroalkane derivs. represented by general formula I are provided, wherein R1 and R2 are each independently hydrogen, C1-C10 alkyl, haloalkyl, alkoxyalkyl or C6-C12 aryl, with the proviso that the alkyl, haloalkyl and alkoxyalkyl groups may each take a straight- or branched-chain structure or a cyclic structure; and Rf1, Rf2

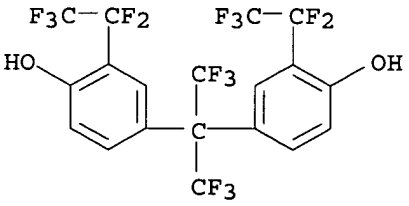
and Rf3 are each independently straight, branched or cyclic C1-C10 perfluoroalkyl, or alternatively Rf2 and Rf3 together with the carbon atom to which they are bonded may form C3-C8 fluorocycloalkyl. The derivs. are useful as intermediates for various organic compds. and polymers. Thus, 27.9 g 2,2-bis(4-hydroxyphenyl)hexafluoropopane was reacted with 130 g pentafluoroethylphenyliodonium trifluoromethanesulfonate in methylene chloride containing pyridine to give 18.0 g 2,2-bis(4-hydroxy-3-pentafluoroethylphenyl)hexafluoropopane.

IT **262862-13-5P 324001-97-0P 324001-98-1P 324001-99-2P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(preparation of bis(4-hydroxy-3-perfluoroalkylphenyl)fluoroalkane derivs.)

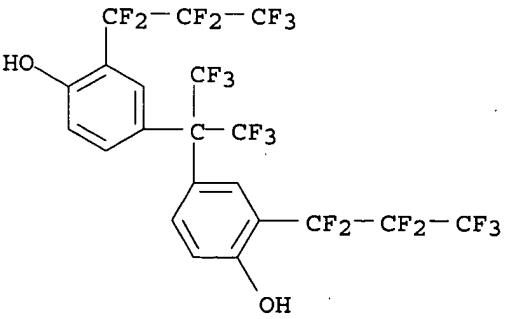
RN 262862-13-5 HCAPLUS
CN Phenol, 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[2-(trifluoromethyl)- (9CI) (CA INDEX NAME)



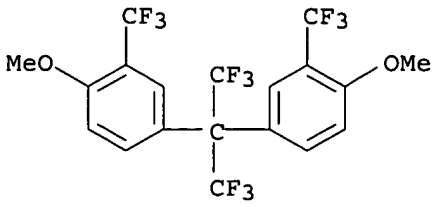
RN 324001-97-0 HCAPLUS
CN Phenol, 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[2-(pentafluoroethyl)- (9CI) (CA INDEX NAME)



RN 324001-98-1 HCAPLUS
CN Phenol, 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[2-(heptafluoropropyl)- (9CI) (CA INDEX NAME)



RN 324001-99-2 HCAPLUS
CN Benzene, 1,1'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[4-methoxy-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Furukawa Electric Co Lt	1991			JP 345907 A	
Hoechst Ag				JP 04230228 A	HCAPLUS
Hoechst Ag				DE 4020184 A	HCAPLUS
Hoechst Ag				EP 464472 A1	HCAPLUS
Hoechst Ag				US 5118874 A	HCAPLUS
Hoechst Ag	1992			EP 464472 A1	HCAPLUS
Konica Corporation	2000			JP 2000105472 A	HCAPLUS
Mitsui Toatsu Chemicals	1994			JP 06116555 A	HCAPLUS
Mitsui Toatsu Chemicals	1996			JP 08179112 A	HCAPLUS
Nippon Mektron Kk				JP 07126200 A	HCAPLUS
Nippon Mektron Kk				CN 1106372 A	HCAPLUS
Nippon Mektron Kk				US 5763699 A	HCAPLUS
Nippon Mektron Kk				DE 69408085 E	
Nippon Mektron Kk	1998			EP 650949 B1	HCAPLUS
Nof Corporation	1992			JP 482855 A	
Sagami Chemical Researc	1992			JP 04283524 A	HCAPLUS
Teijin Limited	1989			JP 161706 A	

L123 ANSWER 2 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:383668 HCAPLUS
DN 133:30570
TI A process for producing perfluoroalkylaniline derivatives
IN Onishi, Masanobu; Yoshiura, Akihiko; Kohno, Eiji; Tsubata, Kenji
PA Nihon Nohyaku Co., Ltd., Japan
SO Eur. Pat. Appl., 25 pp.
CODEN: EPXXDW
DT **Patent**
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1006102	A2	20000607	EP 1999-123023	19991119 <--
	EP 1006102	A3	20001004		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	AU 9959374	A1	20000601	AU 1999-59374	19991112 <--
	AU 731777	B2	20010405		
	IN 189270	A	20030125	IN 1999-MA1117	19991116 <--
	TW 513393	B	20021211	TW 1999-88120170	19991118 <--
	EP 1380568	A2	20040114	EP 2003-23120	19991119 <--
	EP 1380568	A3	20040519		
	R: CH, DE, FR, GB, IT, LI				
	JP 2001122836	A2	20010508	JP 1999-338707	19991129 <--
	KR 2000035767	A	20000626	KR 1999-53713	19991130 <--
	CN 1257861	A	20000628	CN 1999-122801	19991130 <--
	US 2002198399	A1	20021226	US 2002-206769	20020729 <--
	US 6600074	B2	20030729		
	US 2003204104	A1	20031030	US 2003-437381	20030514 <--
	US 6717013	B2	20040406		
PRAI	JP 1998-340354	A	19981130 <--		

	JP 1998-361844	A	19981204	<--
	JP 1999-229304	A	19990813	<--
	EP 1999-123023	A3	19991119	<--
	US 1999-450228	B1	19991129	<--
	US 2002-206769	A1	20020729	

OS CASREACT 133:30570; MARPAT 133:30570

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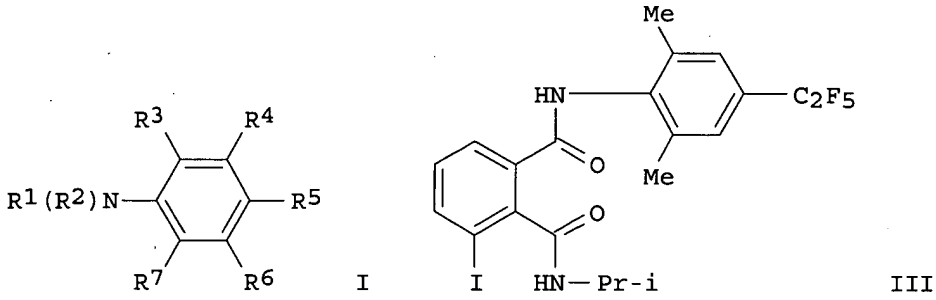
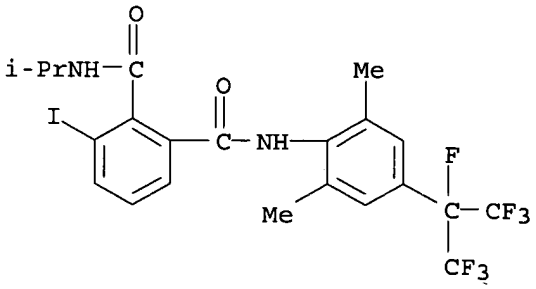


AB Title compds. (I) [wherein R1 and R2 = independently H, (cyclo)alkyl, hydroxyalkyl, carboxyalkyl, or acyl; R3, R4, R5, R6 and R7 = independently H, halo, OH, NO2, haloalkylthio, (un)substituted aminoalkyl, Ph, benzyl, or NH2 etc.] were prepared by a process using various anilines as substrates and affording products with high position selectivity in high yield. The process uses a catalytic amount of inexpensive reaction initiating agent, an easily recoverable reaction solvent which doubles as an extraction solvent, and produces a very small amount of wastes. I are useful as raw materials for agricultural and horticultural insecticides. Thus, 2,6-dimethyl-4-pentafluoroethylaniline (II) was prepared in 87% yield from 2,6-dimethylaniline and perfluoroethyl iodide in t-BuOMe/H2O with a Na2S2O4 initiator in the presence of NaHCO3 and tetrabutylammonium hydrogen sulfate. Coupling II with 6-iodo-N-isopropylphthalic acid isoimide in THF gave the insecticide III (95%). At 500 ppm III completely controlled diamondback moths and common cutworms on cabbage.

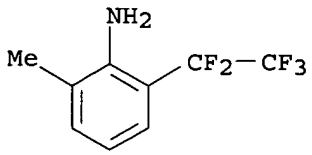
IT **226978-71-8P**
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(process for producing perfluoroalkylanilines from anilines and perfluoroalkyl iodides using a Na2S2O4 initiator)

RN 226978-71-8 HCAPLUS

CN 1,2-Benzenedicarboxamide, N1-[2,6-dimethyl-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]phenyl]-3-iodo-N2-(1-methylethyl)- (9CI) (CA INDEX NAME)



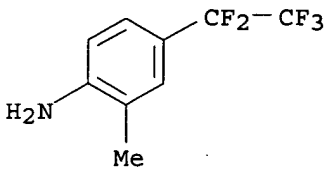
IT **273735-58-3P**, 2-Methyl-6-pentafluoroethylaniline
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(process for producing perfluoroalkylanilines from anilines and perfluoroalkyl iodides using a Na2S2O4 initiator)
RN 273735-58-3 HCAPLUS
CN Benzenamine, 2-methyl-6-(pentafluoroethyl)- (9CI) (CA INDEX NAME)



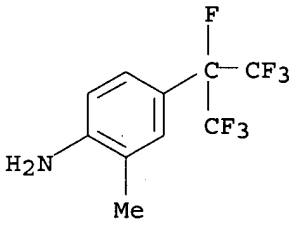
IT **226979-96-0P**, 2-Methyl-4-pentafluoroethylaniline
238098-26-5P, 2-Methyl-4-heptafluoroisopropylaniline
238098-28-7P, 2-Methyl-4-(nonafluorobutyl)aniline
257868-17-0P, 2,6-Dimethyl-4-perfluorooctylaniline
273735-33-4P, 3-Methyl-4-heptafluoroisopropylaniline
273735-34-5P, 2-Ethyl-4-heptafluoroisopropylaniline
273735-35-6P, 2-Isopropyl-4-heptafluoroisopropylaniline
273735-41-4P, 4-Heptafluoroisopropyl-2,3-dimethylaniline
273735-42-5P, 4-Heptafluoroisopropyl-2,5-dimethylaniline
273735-43-6P, 4-Heptafluoroisopropyl-2,6-dimethylaniline
273735-44-7P, 4-Heptafluoroisopropyl-2,6-diethylaniline
273735-45-8P, 4-Heptafluoroisopropyl-2,6-diisopropylaniline
273735-46-9P, 5-Fluoro-4-heptafluoroisopropyl-2-methylaniline
273735-47-0P, 5-Chloro-4-heptafluoroisopropyl-2-methylaniline
273735-48-1P, 4-Heptafluoroisopropyl-N,2-dimethylaniline
273735-52-7P, 4-tert-Butyl-2-heptafluoroisopropylaniline
273735-53-8P, 2-Heptafluoroisopropyl-4-methylaniline
273735-55-0P, 2-Methyl-4-perfluorooctylaniline
273735-57-2P, 2,6-Diethyl-4-pentafluoroethylaniline
273735-59-4P, 4-tert-Butyl-2-pentafluoroethylaniline
273735-60-7P, 2,6-Dimethyl-4-heptafluoropropylaniline
273735-62-9P, 4-Heptafluoroisopropyl-2-hydroxy-5-methylaniline
273735-68-5P, 2-Heptafluoroisopropyl-4-isopropylaniline
273735-70-9P, 2-Heptafluoroisopropyl-5-(1-hydroxyethyl)aniline
273735-72-1P, 4-Heptafluoroisopropyl-3-hydroxymethylaniline
273735-73-2P, 4-Heptafluoroisopropyl-2-(1-hydroxyethyl)aniline
273735-74-3P, 4-Heptafluoroisopropyl-2-(4-methylpentan-2-yl)aniline **273735-75-4P**, 3,5-Dimethyl-2-heptafluoroisopropylaniline **273735-79-8P**, N-Acetyl-4-heptafluoroisopropyl-2-methylaniline **273735-80-1P**, 4-Heptafluoroisopropyl-N-methoxycarbonyl-2-methylaniline **273735-81-2P**, N-tert-Butoxycarbonyl-2-fluoromethyl-4-heptafluoroisopropylaniline **273735-82-3P** **273735-83-4P**, N-tert-Butoxycarbonyl-4-heptafluoroisopropyl-2-(hydroxymethyl)aniline **273735-84-5P**, N-tert-Butoxycarbonyl-2-chloromethyl-4-heptafluoroisopropylaniline **273735-85-6P** **273735-86-7P**, 2-(Hydroxymethyl)-4-heptafluoroisopropyl-N-methoxycarbonylaniline **273735-92-5P**, 4-Heptafluoroisopropyl-5-(hydroxymethyl)-2-methylaniline **273735-93-6P**, 4-Acetyl-2-heptafluoroisopropylaniline **273735-94-7P**, 2-Ethyl-4-heptafluoroisopropyl-6-methylaniline **273735-95-8P**, 2,6-Dimethyl-4-nonafluorobutylaniline **273735-96-9P**, 2,6-Dimethyl-4-perfluorohexylaniline **273735-97-0P**, 2,6-Diethyl-4-nonafluorobutylaniline **273735-98-1P**, 2,6-Diethyl-4-perfluorohexylaniline **273735-99-2P**,

2-(Hydroxymethyl)-4-perfluorohexylaniline
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(process for producing perfluoroalkylanilines from anilines and perfluoroalkyl iodides using a Na2S2O4 initiator)

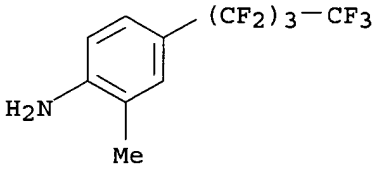
RN 226979-96-0 HCAPLUS
CN Benzenamine, 2-methyl-4-(pentafluoroethyl)- (9CI) (CA INDEX NAME)



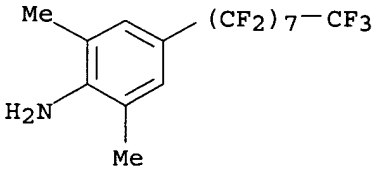
RN 238098-26-5 HCAPLUS
CN Benzenamine, 2-methyl-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- (9CI) (CA INDEX NAME)



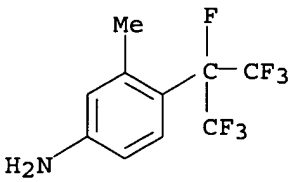
RN 238098-28-7 HCAPLUS
CN Benzenamine, 2-methyl-4-(nonafluorobutyl)- (9CI) (CA INDEX NAME)



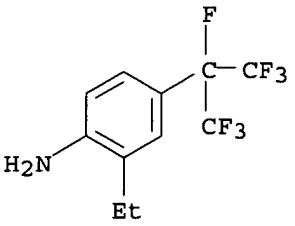
RN 257868-17-0 HCAPLUS
CN Benzenamine, 4-(heptadecafluorooctyl)-2,6-dimethyl- (9CI) (CA INDEX NAME)



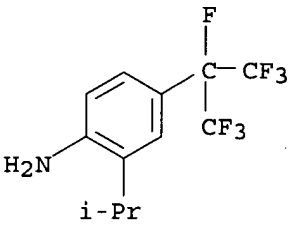
RN 273735-33-4 HCAPLUS
CN Benzenamine, 3-methyl-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- (9CI) (CA INDEX NAME)



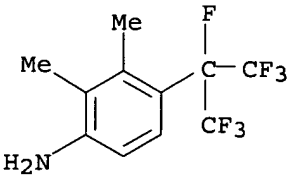
RN 273735-34-5 HCAPLUS
CN Benzenamine, 2-ethyl-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- (9CI) (CA INDEX NAME)



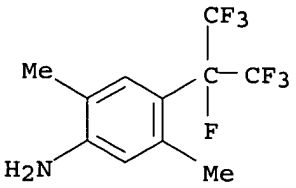
RN 273735-35-6 HCAPLUS
CN Benzenamine, 2-(1-methylethyl)-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- (9CI) (CA INDEX NAME)



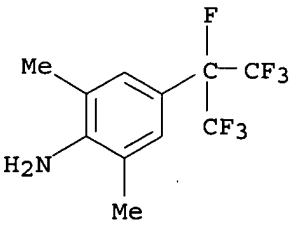
RN 273735-41-4 HCAPLUS
CN Benzenamine, 2,3-dimethyl-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- (9CI) (CA INDEX NAME)



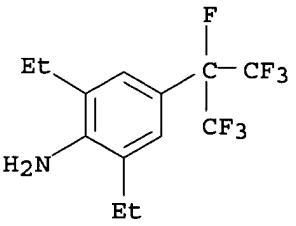
RN 273735-42-5 HCAPLUS
CN Benzenamine, 2,5-dimethyl-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- (9CI) (CA INDEX NAME)



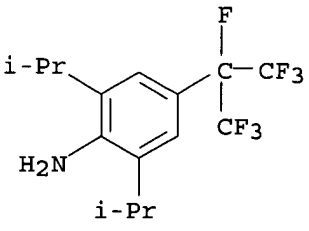
RN 273735-43-6 HCAPLUS
CN Benzenamine, 2,6-dimethyl-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- (9CI) (CA INDEX NAME)



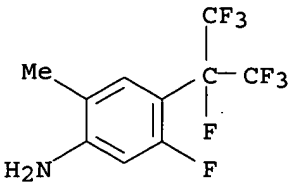
RN 273735-44-7 HCAPLUS
CN Benzenamine, 2,6-diethyl-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- (9CI) (CA INDEX NAME)



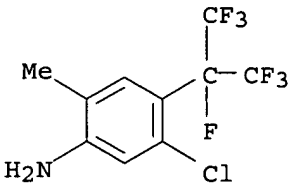
RN 273735-45-8 HCAPLUS
CN Benzenamine, 2,6-bis(1-methylethyl)-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- (9CI) (CA INDEX NAME)



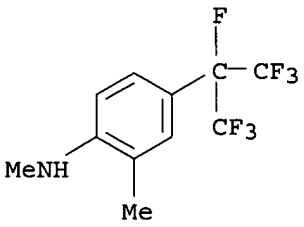
RN 273735-46-9 HCAPLUS
CN Benzenamine, 5-fluoro-2-methyl-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- (9CI) (CA INDEX NAME)



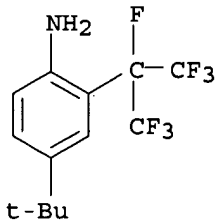
RN 273735-47-0 HCAPLUS
CN Benzenamine, 5-chloro-2-methyl-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- (9CI) (CA INDEX NAME)



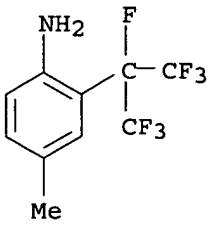
RN 273735-48-1 HCAPLUS
CN Benzenamine, N,2-dimethyl-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- (9CI) (CA INDEX NAME)



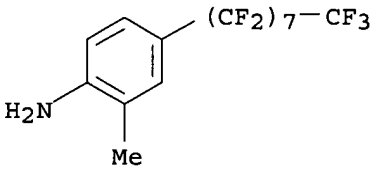
RN 273735-52-7 HCAPLUS
CN Benzenamine, 4-(1,1-dimethylethyl)-2-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- (9CI) (CA INDEX NAME)



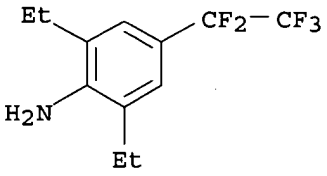
RN 273735-53-8 HCAPLUS
CN Benzenamine, 4-methyl-2-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- (9CI) (CA INDEX NAME)



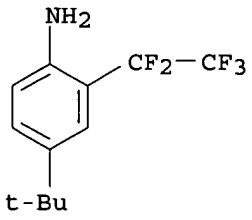
RN 273735-55-0 HCAPLUS
CN Benzenamine, 4-(heptadecafluorooctyl)-2-methyl- (9CI) (CA INDEX NAME)



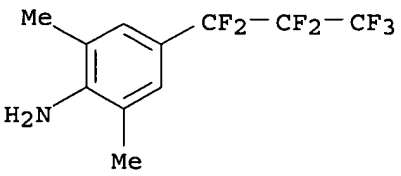
RN 273735-57-2 HCAPLUS
CN Benzenamine, 2,6-diethyl-4-(pentafluoroethyl)- (9CI) (CA INDEX NAME)



RN 273735-59-4 HCAPLUS
CN Benzenamine, 4-(1,1-dimethylethyl)-2-(pentafluoroethyl)- (9CI) (CA INDEX NAME)

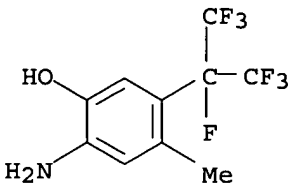


RN 273735-60-7 HCAPLUS
CN Benzenamine, 4-(heptafluoropropyl)-2,6-dimethyl- (9CI) (CA INDEX NAME)

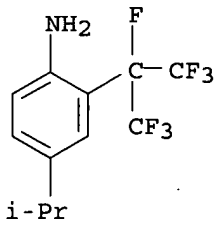


RN 273735-62-9 HCAPLUS

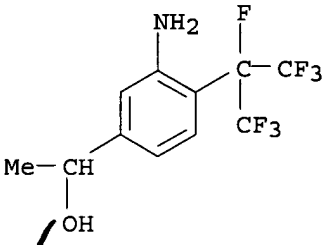
CN Phenol, 2-amino-4-methyl-5-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- (9CI) (CA INDEX NAME)



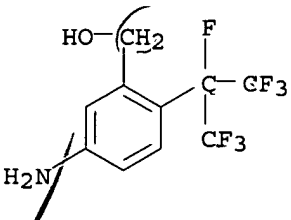
RN 273735-68-5 HCAPLUS
CN Benzenamine, 4-(1-methylethyl)-2-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- (9CI) (CA INDEX NAME)



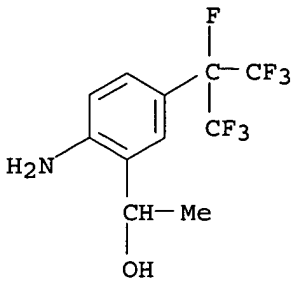
RN 273735-70-9 HCAPLUS
CN Benzenemethanol, 3-amino-α-methyl-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- (9CI) (CA INDEX NAME)



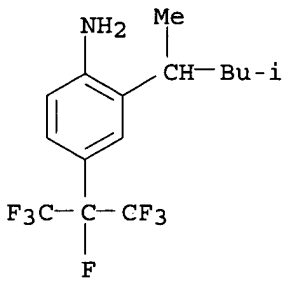
RN 273735-72-1 HCAPLUS
CN Benzenemethanol, 5-amino-2-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- (9CI) (CA INDEX NAME)



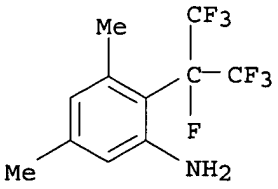
RN 273735-73-2 HCAPLUS
CN Benzenemethanol, 2-amino-α-methyl-5-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- (9CI) (CA INDEX NAME)



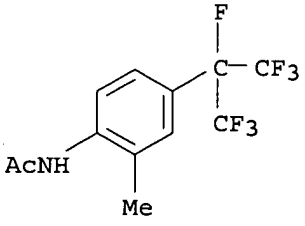
RN 273735-74-3 HCAPLUS
CN Benzenamine, 2-(1,3-dimethylbutyl)-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- (9CI) (CA INDEX NAME)



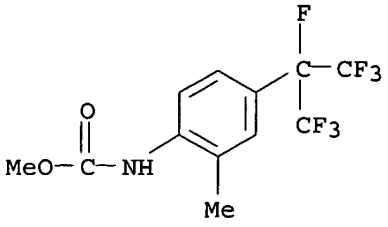
RN 273735-75-4 HCAPLUS
CN Benzenamine, 3,5-dimethyl-2-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- (9CI) (CA INDEX NAME)



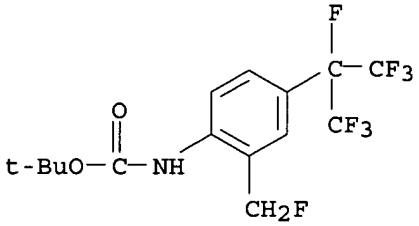
RN 273735-79-8 HCAPLUS
CN Acetamide, N-[2-methyl-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]phenyl]- (9CI) (CA INDEX NAME)



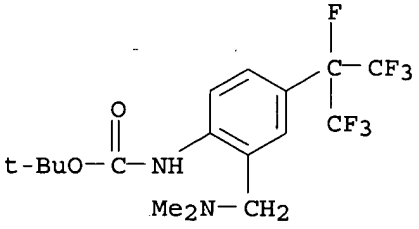
RN 273735-80-1 HCAPLUS
CN Carbamic acid, [2-methyl-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



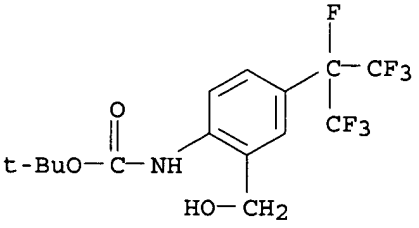
RN 273735-81-2 HCAPLUS
CN Carbamic acid, [2-(fluoromethyl)-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]phenyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



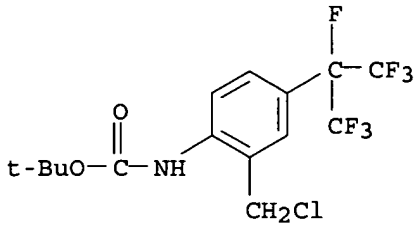
RN 273735-82-3 HCAPLUS
CN Carbamic acid, [2-[(dimethylamino)methyl]-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]phenyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



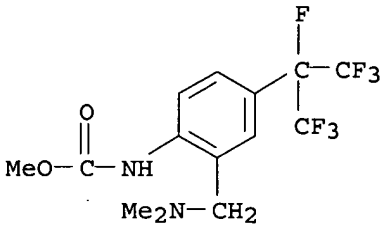
RN 273735-83-4 HCAPLUS
CN Carbamic acid, [2-(hydroxymethyl)-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]phenyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



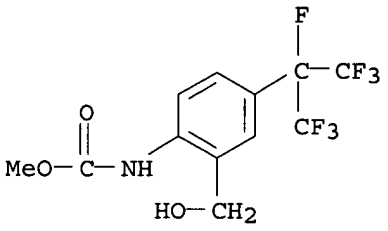
RN 273735-84-5 HCAPLUS
CN Carbamic acid, [2-(chloromethyl)-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]phenyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



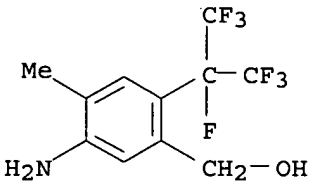
RN 273735-85-6 HCAPLUS
CN Carbamic acid, [2-[(dimethylamino)methyl]-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



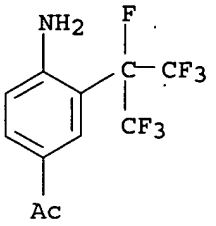
RN 273735-86-7 HCAPLUS
CN Carbamic acid, [2-(hydroxymethyl)-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



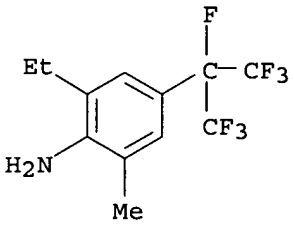
RN 273735-92-5 HCAPLUS
CN Benzenemethanol, 5-amino-4-methyl-2-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- (9CI) (CA INDEX NAME)



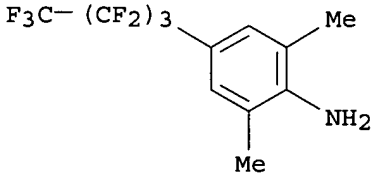
RN 273735-93-6 HCAPLUS
CN Ethanone, 1-[4-amino-3-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]phenyl]- (9CI) (CA INDEX NAME)



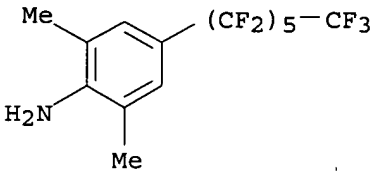
RN 273735-94-7 HCAPLUS
CN Benzenamine, 2-ethyl-6-methyl-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- (9CI) (CA INDEX NAME)



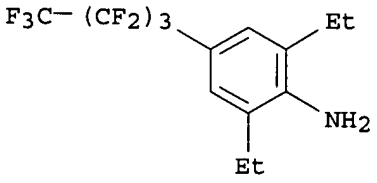
RN 273735-95-8 HCAPLUS
CN Benzenamine, 2,6-dimethyl-4-(nonafluorobutyl)- (9CI) (CA INDEX NAME)



RN 273735-96-9 HCAPLUS
CN Benzenamine, 2,6-dimethyl-4-(tridecafluorohexyl)- (9CI) (CA INDEX NAME)

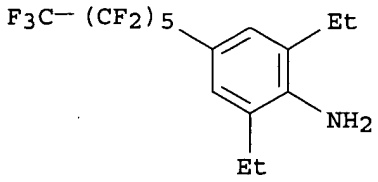


RN 273735-97-0 HCAPLUS
CN Benzenamine, 2,6-diethyl-4-(nonafluorobutyl)- (9CI) (CA INDEX NAME)

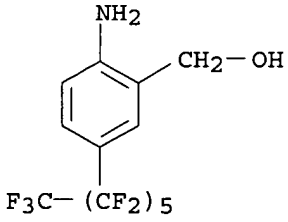


RN 273735-98-1 HCAPLUS

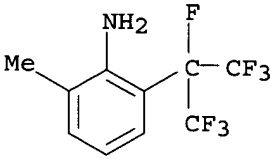
CN Benzenamine, 2,6-diethyl-4-(tridecafluorohexyl)- (9CI) (CA INDEX NAME)



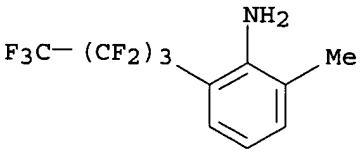
RN 273735-99-2 HCAPLUS
CN Benzenemethanol, 2-amino-5-(tridecafluorohexyl)- (9CI) (CA INDEX NAME)



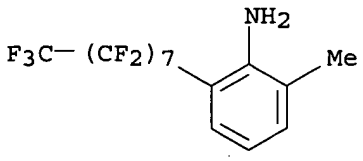
IT **273736-01-9**, 2-Methyl-6-heptafluoroisopropylaniline
273736-03-1, 2-Methyl-6-nonafluorobutylaniline **273736-04-2**
, 2-Methyl-6-perfluorooctylaniline
RL: RCT (Reactant); RACT (Reactant or reagent)
(process for producing perfluoroalkylanilines from anilines and perfluoroalkyl iodides using a Na2S2O4 initiator)
RN 273736-01-9 HCAPLUS
CN Benzenamine, 2-methyl-6-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]-
(9CI) (CA INDEX NAME)



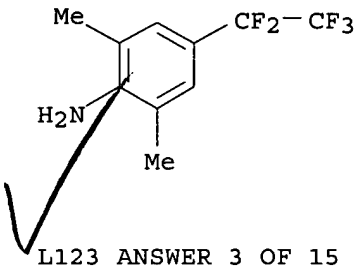
RN 273736-03-1 HCAPLUS
CN Benzenamine, 2-methyl-6-(nonafluorobutyl)- (9CI) (CA INDEX NAME)



RN 273736-04-2 HCAPLUS
CN Benzenamine, 2-(heptadecafluorooctyl)-6-methyl- (9CI) (CA INDEX NAME)



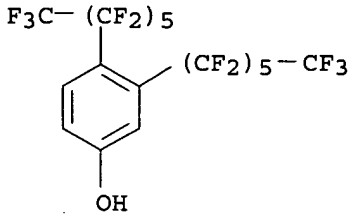
IT **273735-56-1P**, 2,6-Dimethyl-4-pentafluoroethylaniline
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(target intermediate for insecticide production; process for producing perfluoroalkylanilines from anilines and perfluoroalkyl iodides using a Na2S2O4 initiator)
RN 273735-56-1 HCAPLUS
CN Benzenamine, 2,6-dimethyl-4-(pentafluoroethyl)- (9CI) (CA INDEX NAME)



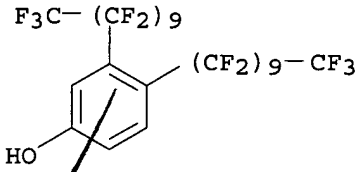
L123 ANSWER 3 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1996:87742 HCAPLUS
DN 124:232039
TI Preparation of (perfluoroalkyl)phenols from halophenols
IN Iwahara, Masahiro
PA Idemitsu Petrochemical Co, Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 07304702	A2	19951121	JP 1994-94473	19940506 <--
PRAI JP 1994-94473		19940506 <--		

OS CASREACT 124:232039
AB (Perfluoroalkyl)phenols, useful as terminating agents for polycarbonate manufacture and materials and components for liquid-crystal display devices, surfactants, etc., are prepared by treatment of halophenols with C1-20 perfluoroalkyl iodides in the presence of metal Cu catalyst. A mixture of C10F21I, p-IC6H4OH, Cu powder, and DMSO was heated at 120° for 15 h to give 72% p-C10F21C6H4OH.
IT **174611-78-0P 174611-79-1P**
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(preparation of (perfluoroalkyl)phenols from halophenols and perfluoroalkyl iodides using metal Cu catalyst)
RN 174611-78-0 HCAPLUS
CN Phenol, 3,4-bis(tridecafluorohexyl)- (9CI) (CA INDEX NAME)



RN 174611-79-1 HCAPLUS
CN Phenol, 3,4-bis(heneicosafluorodecyl)- (9CI) (CA INDEX NAME)



L123 ANSWER 4 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1994:244325 HCAPLUS
DN 120:244325
TI Polyfluoroalkylation of aromatic compounds and polymers
IN May, Donald Douglas
PA du Pont de Nemours, E. I., and Co., USA
SO PCT Int. Appl., 16 pp.
CODEN: PIXXD2
DT **Patent**
LA English
FAN.CNT 2

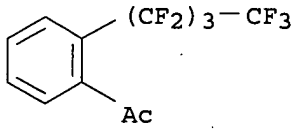
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9316969	A1	19930902	WO 1993-US1459	19930224 <--
	W: AU, CA, FI, JP, KR, NO				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9337245	A1	19930913	AU 1993-37245	19930224 <--
	EP 628019	A1	19941214	EP 1993-906064	19930224 <--
	EP 628019	B1	19970423		
	R: DE, FR, GB, NL				
	JP 07504414	T2	19950518	JP 1993-514955	19930224 <--
PRAI	US 1992-843749	A	19920228 <--		
	US 1992-843885	A	19920228 <--		
	WO 1993-US1459	A	19930224 <--		

OS CASREACT 120:244325
AB Polyfluorinated aromatic compds. or polymers are prepared by reaction of aromatic compds. or aromatic polymers (which are subject to electrophilic attack) with a C1-20 polyfluoroalkyl iodide in the presence of an aqueous alkali or alkaline earth hydroxide or (bi)carbonate and a catalyst containing ≥1 of Rh, Pd, Pt, Ru, Cu, Ni, Re, or Co. For example, reaction of benzene with CF3(CF2)3I (I) in 50% aq K2CO3 in the presence of a silica-supported catalyst containing 2% Pd and 0.1% Pt at 170° for 30 h gave complete conversion of I, and produced (perfluorobutyl)benzene and mixed isomers of di(perfluorobutyl)benzene in yields of 93% and 5%, resp. The identical reaction without H2O gave yields of only 55% and 1%, with 43% unreacted I. Other examples of perfluoroalkylation using I included naphthalene, anthracene, PhCN (with concomitant hydrolysis), PhMe, PhOH, PhAc, PhOMe, and p-ClC6H4NH2. Mixed C4-10 perfluoroalkyl (telomer) iodides were used

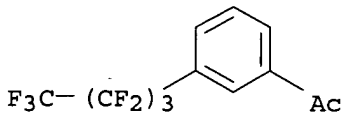
with benzene, styrene-maleic acid copolymer, polystyrene, and polystyrene sulfonate Na salt.

IT **152330-63-7P 152330-64-8P 152330-65-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of perfluoroalkylated aroms. and aromatic polymers)

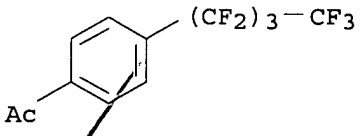
RN 152330-63-7 . HCAPLUS
CN Ethanone, 1-[2-(nonafluorobutyl)phenyl]- (9CI) (CA INDEX NAME)



RN 152330-64-8 HCAPLUS
CN Ethanone, 1-[3-(nonafluorobutyl)phenyl]- (9CI) (CA INDEX NAME)



RN 152330-65-9 HCAPLUS
CN Ethanone, 1-[4-(nonafluorobutyl)phenyl]- (9CI) (CA INDEX NAME)



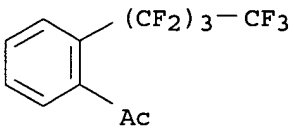
L123 ANSWER 5 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1994:216928 HCAPLUS
DN 120:216928
TI Process and catalysts for the perfluoroalkylation of aromatic hydrocarbons
IN May, Donald D.
PA du Pont de Nemours, E. I., and Co., USA
SO U.S., 6 pp. Cont.-in-part of U.S. Ser. No. 843,749, abandoned.
CODEN: USXXAM
DT **Patent**
LA English
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5276194	A	19940104	US 1993-59184	19930507 <--
PRAI US 1992-843749	B2	19920228 <--		

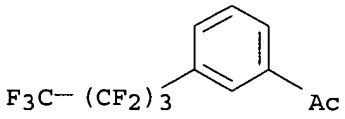
OS CASREACT 120:216928
AB Aromatic hydrocarbons are effectively perfluoroalkylated by reacting a perfluoroalkyl iodide with the aromatic hydrocarbon in the presence of a platinum group metal catalyst and an aqueous inorg. base selected from alkaline metal and alkaline earth metal hydroxides, carbonates, and bicarbonates. Thus, C6H6, ICF2CF2CF2CF3, 50% aqueous K2CO3 solution, and a catalyst consisting of 2% Pd and 0.1% Pt on a silica support was heated with stirring for 30 h at 170°, producing a 93% yield of PhCF2CF2CF2CF3 and a 5% yield of mixed dye (perfluorobutyl)benzene isomers.

IT **152330-63-7P 152330-64-8P 152330-65-9P**
153910-94-2P, 1,2-Di(perfluorobutyl)benzene **153910-95-3P**
, 1,3-Di(perfluorobutyl)benzene **153910-96-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(catalysts for preparation of)

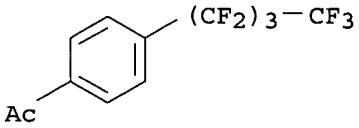
RN 152330-63-7 HCAPLUS
CN Ethanone, 1-[2-(nonafluorobutyl)phenyl]- (9CI) (CA INDEX NAME)



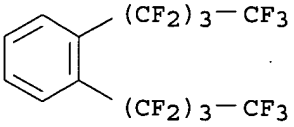
RN 152330-64-8 HCAPLUS
CN Ethanone, 1-[3-(nonafluorobutyl)phenyl]- (9CI) (CA INDEX NAME)



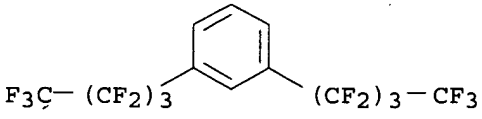
RN 152330-65-9 HCAPLUS
CN Ethanone, 1-[4-(nonafluorobutyl)phenyl]- (9CI) (CA INDEX NAME)



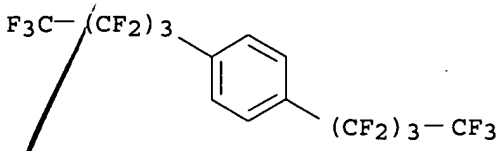
RN 153910-94-2 HCAPLUS
CN Benzene, 1,2-bis(nonafluorobutyl)- (9CI) (CA INDEX NAME)



RN 153910-95-3 HCAPLUS
CN Benzene, 1,3-bis(nonafluorobutyl)- (9CI) (CA INDEX NAME)



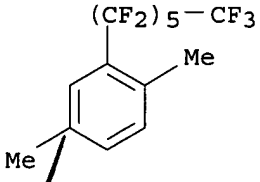
RN 153910-96-4 HCAPLUS
CN Benzene, 1,4-bis(nonafluorobutyl)- (9CI) (CA INDEX NAME)



L123 ANSWER 6 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1992:151298 HCAPLUS
DN 116:151298
TI Preparation of perfluoroalkylbenzenes or -naphthalenes
IN Kamigata, Nobumasa; Yoshida, Masato; Sawada, Hideo; Nakayama, Masaharu
PA Nippon Oil and Fats Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 03240739	A2	19911028	JP 1990-32419	19900215 <--
PRAI JP 1990-32419		19900215 <--		

OS CASREACT 116:151298; MARPAT 116:151298
AB Aromatic compds. are treated with F(CF2)nSO2Cl (n = 1-20) in the presence of metal catalysts to introduce fluoroalkyl groups into benzene or naphthalene rings of the aromatic compds. 1,4-Dimethoxybenzene was treated with perfluorohexanesulfonyl chloride and (Ph3P)3RuCl2 at 120° for 24 h to give 81% 1,4-dimethoxy-2-perfluorohexylbenzene.
IT **123524-58-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, by perfluoroalkylation with perfluoroalkanesulfonyl chloride)
RN 123524-58-3 HCAPLUS
CN Benzene, 1,4-dimethyl-2-(tridecafluorohexyl)- (9CI) (CA INDEX NAME)



L123 ANSWER 7 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1992:20793 HCAPLUS
DN 116:20793
TI Preparation of perfluoroalkyl group containing compounds
IN Fuchigami, Takamasa; Urata, Hisao
PA Sagami Chemical Research Center, Japan
SO Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 03218325	A2	19910925	JP 1990-59885	19900313 <--
PRAI JP 1989-284746	A1	19891102 <--		

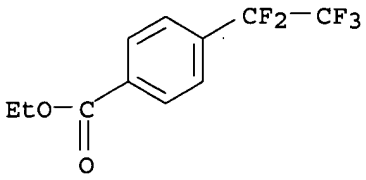
OS CASREACT 116:20793; MARPAT 116:20793

AB Title compds. CnF2n+1R [R = (un)substituted aryl, aralkyl, alkenyl; n = 1-10] were prepared by reaction of RX (X = Br, iodo) with CnF2n+1SiR1R2R3 (R1, R2, R3 = alkyl) in the presence of Cu salts and fluoride ion sources. Thus, stirring 4-O2NC6H4I with CF3SiEt3, CuI, and KF in DMF under Ar at 80° for 24 h gave 86% 4-O2NC6H4CF3.

IT **133512-60-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 133512-60-4 HCAPLUS

CN Benzoic acid, 4-(pentafluoroethyl)-, ethyl ester (9CI) (CA INDEX NAME)



L123 ANSWER 8 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1991:631878 HCAPLUS

DN 115:231878

TI Preparation of fluoroalkyl aromatic nitrogen compounds

IN Mitani, Motohiro; Sawada, Hideo; Nakayama, Masaharu

PA Nippon Oil and Fats Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 18 pp.
CODEN: JKXXAF

DT **Patent**

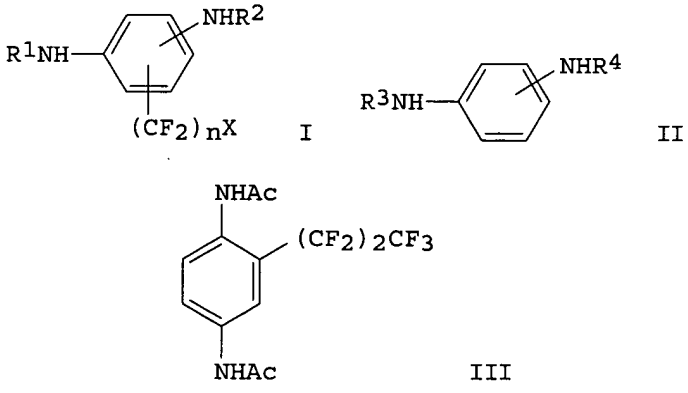
LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 03109362	A2	19910509	JP 1989-286026	19891104 <--
JP 2775913	B2	19980716		
PRAI JP 1989-139160	A1	19890602 <--		

OS CASREACT 115:231878; MARPAT 115:231878

GI

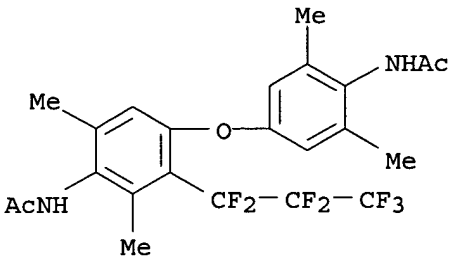


AB Title compds., e.g. I (R1, R2 = H, acyl, fluoroacyl; X = H, Cl, F; n = 1-10) were prepared by fluoroalkylation of compds. II (R3, R4 = acyl, fluoroacyl) with X(CF2)nCO2O2C(CF)nX. E.g., treating N,N'-diacetyl-p-phenylenediamine with bis(heptafluorobutyryl) peroxide in 1,1,2-trichlorotrifluoroethane at 40° for 5 h gave 56%

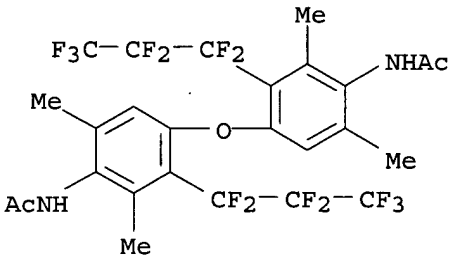
heptafluoropropyl-N,N'-diacetyl-p-phenylenediamine (III).

IT **135977-29-6P 135977-30-9P 135977-31-0P**
135977-32-1P 135977-35-4P 135977-36-5P
135977-37-6P 135977-38-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrolysis of)

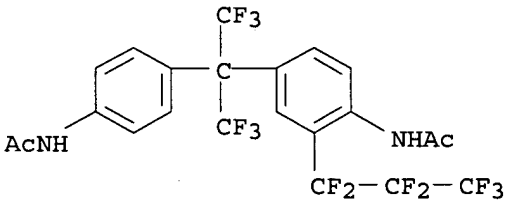
RN 135977-29-6 HCAPLUS
CN Acetamide, N-[4-[4-(acetylamino)-3,5-dimethylphenoxy]-3-(heptafluoropropyl)-2,6-dimethylphenyl]- (9CI) (CA INDEX NAME)



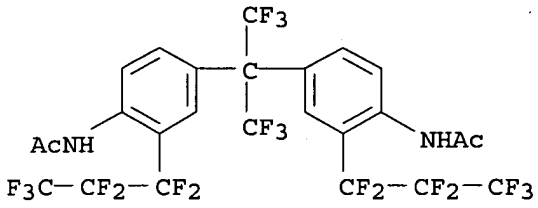
RN 135977-30-9 HCAPLUS
CN Acetamide, N,N'-[oxybis[3-(heptafluoropropyl)-2,6-dimethyl-4,1-phenylene]]bis- (9CI) (CA INDEX NAME)



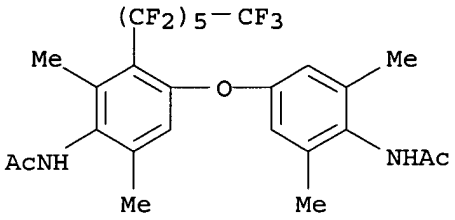
RN 135977-31-0 HCAPLUS
CN Acetamide, N-[4-[1-[4-(acetylamino)-3-(heptafluoropropyl)phenyl]-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]phenyl]- (9CI) (CA INDEX NAME)



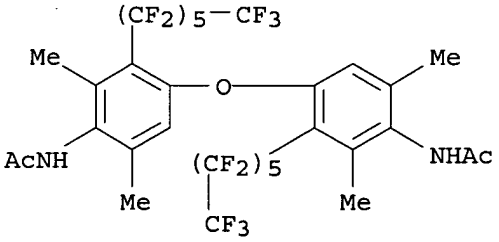
RN 135977-32-1 HCAPLUS
CN Acetamide, N,N'-[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[2-(heptafluoropropyl)-4,1-phenylene]]bis- (9CI) (CA INDEX NAME)



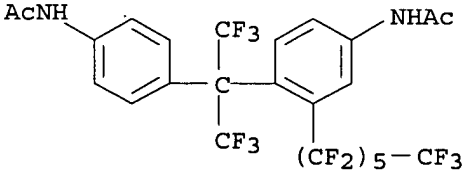
RN 135977-35-4 HCAPLUS
CN Acetamide, N-[4-[4-(acetylamino)-3,5-dimethylphenoxy]-2,6-dimethyl-3-(tridecafluorohexyl)phenyl]- (9CI) (CA INDEX NAME)



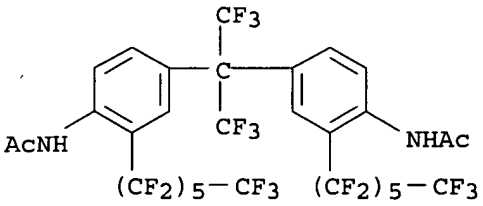
RN 135977-36-5 HCAPLUS
CN Acetamide, N,N'-[oxybis[2,6-dimethyl-3-(tridecafluorohexyl)-4,1-phenylene]]bis- (9CI) (CA INDEX NAME)



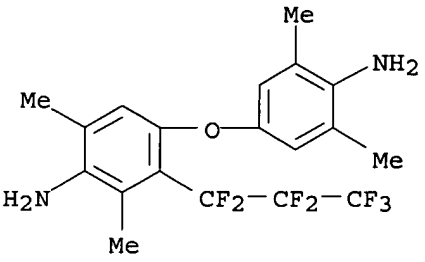
RN 135977-37-6 HCAPLUS
CN Acetamide, N-[4-[1-[4-(acetylamino)phenyl]-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]-3-(tridecafluorohexyl)phenyl]- (9CI) (CA INDEX NAME)



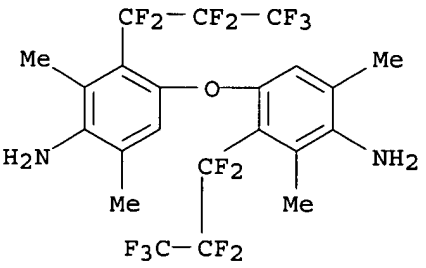
RN 135977-38-7 HCAPLUS
CN Acetamide, N,N'-[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[2-(tridecafluorohexyl)-4,1-phenylene]]bis- (9CI) (CA INDEX NAME)



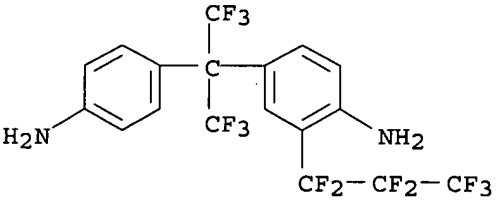
IT **135977-41-2P 135977-42-3P 135977-43-4P**
135977-44-5P 135977-47-8P 135977-48-9P
135977-49-0P 136507-93-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 135977-41-2 HCAPLUS
CN Benzenamine, 4-(4-amino-3,5-dimethylphenoxy)-3-(heptafluoropropyl)-2,6-dimethyl- (9CI) (CA INDEX NAME)



RN 135977-42-3 HCAPLUS
CN Benzenamine, 4,4'-oxybis[3-(heptafluoropropyl)-2,6-dimethyl- (9CI) (CA INDEX NAME)

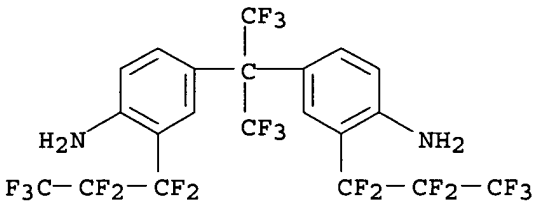


RN 135977-43-4 HCAPLUS
CN Benzenamine, 4-[1-(4-aminophenyl)-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]-2-(heptafluoropropyl)- (9CI) (CA INDEX NAME)

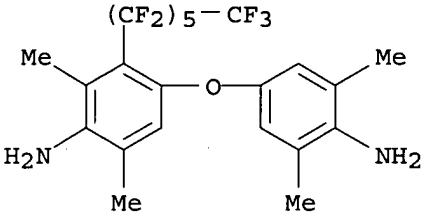


RN 135977-44-5 HCAPLUS
CN Benzenamine, 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[2-

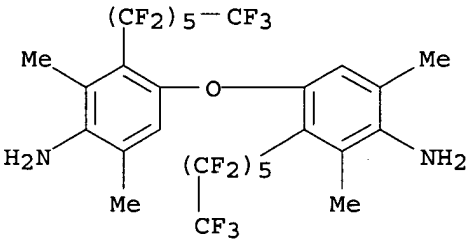
(heptafluoropropyl)- (9CI) (CA INDEX NAME)



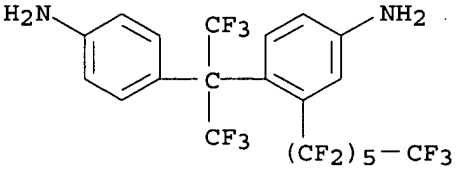
RN 135977-47-8 HCAPLUS
CN Benzenamine, 4-(4-amino-3,5-dimethylphenoxy)-2,6-dimethyl-3-(tridecafluorohexyl)- (9CI) (CA INDEX NAME)



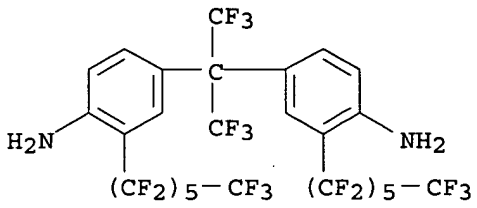
RN 135977-48-9 HCAPLUS
CN Benzenamine, 4,4'-oxybis[2,6-dimethyl-3-(tridecafluorohexyl)- (9CI) (CA INDEX NAME)



RN 135977-49-0 HCAPLUS
CN Benzenamine, 4-[1-(4-aminophenyl)-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]-3-(tridecafluorohexyl)- (9CI) (CA INDEX NAME)



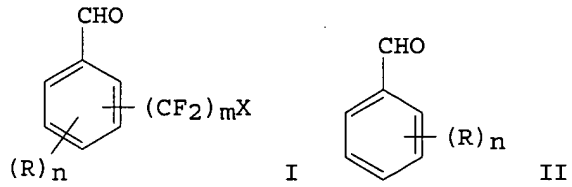
RN 136507-93-2 HCAPLUS
CN Benzenamine, 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[2-(tridecafluorohexyl)- (9CI) (CA INDEX NAME)



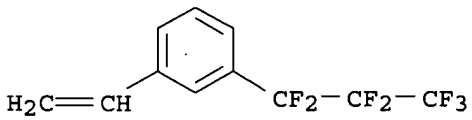
L123 ANSWER 9 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1991:607657 HCAPLUS
DN 115:207657
TI Manufacture of fluorine-containing benzaldehyde derivatives
IN Mitani, Motohiro; Sawada, Hideo; Nakayama, Masaharu
PA Nippon Oil and Fats Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03123751	A2	19910527	JP 1989-260200	19891006 <--
PRAI	JP 1989-260200		19891006 <--		

OS CASREACT 115:207657; MARPAT 115:207657
GI



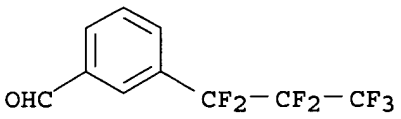
AB Title derivs. I (R = halo, C1-4 alkyl, C1-4 alkoxy, C1-4 alkoxycarbonyl, CO2H, OH, C1-4 alkanesulfonyl; X = F, Cl, H; m = 1-10; n = 0-4; m = 10 when n = 0 or 1 and R = halo) are manufactured by the reaction of benzaldehydes II with X(F2C)mCOO2CO(CF2)mX. Thus, treating benzaldehyde with bis(heptafluorobutyryl) peroxide in 1,1,2-trichlorotrifluoroethane at 40° under N gave 90% 3-heptafluoropropylbenzaldehyde.
IT **131608-36-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 131608-36-1 HCAPLUS
CN Benzene, 1-ethenyl-3-(heptafluoropropyl)- (9CI) (CA INDEX NAME)



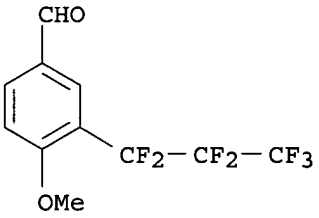
IT **136850-59-4P**, 3-Heptafluoropropylbenzaldehyde **136850-60-7P**, 3-Heptafluoropropyl-4-methoxybenzaldehyde **136850-61-8P**, 3-Heptafluoropropyl-4-hydroxybenzaldehyde **136850-62-9P**, 3-Heptafluoropropyl-4-methylbenzaldehyde

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, by perfluoroalkylation with bis(heptafluorobutyryl) peroxide)

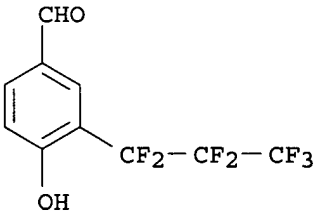
RN 136850-59-4 HCAPLUS
CN Benzaldehyde, 3-(heptafluoropropyl)- (9CI) (CA INDEX NAME)



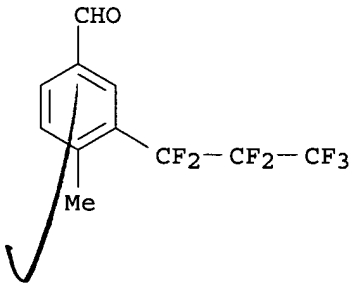
RN 136850-60-7 HCAPLUS
CN Benzaldehyde, 3-(heptafluoropropyl)-4-methoxy- (9CI) (CA INDEX NAME)



RN 136850-61-8 HCAPLUS
CN Benzaldehyde, 3-(heptafluoropropyl)-4-hydroxy- (9CI) (CA INDEX NAME)



RN 136850-62-9 HCAPLUS
CN Benzaldehyde, 3-(heptafluoropropyl)-4-methyl- (9CI) (CA INDEX NAME)

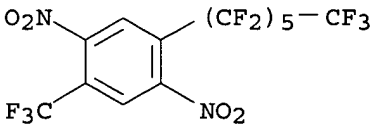


L123 ANSWER 10 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1991:121712 HCAPLUS
DN 114:121712
TI Preparation of perfluoroalkylnitrobenzenes as intermediates for drugs and agrochemicals
IN Powell, Richard Llewellyn; Heaton, Charles Alan
PA Imperial Chemical Industries PLC, UK

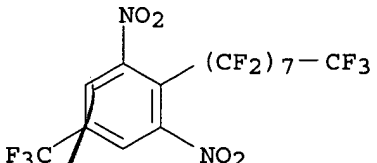
SO Eur. Pat. Appl., 5 pp.
CODEN: EPXXDW
DT **Patent**
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 395342	A2	19901031	EP 1990-304360	19900424 <--
EP 395342	A3	19920129		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE				
JP 02295945	A2	19901206	JP 1990-108985	19900426 <--
US 5113013	A	19920512	US 1990-515509	19900426 <--
PRAI GB 1989-9574	A	19890426 <--		

OS MARPAT 114:121712
AB Fluorine-containing organic compds. were prepared by reacting a sulfonyl halide of the formula: RfSO2X (Rf = fluorinated organic radical and X = halo) with a reactive organic halide in the presence of a metal known to complex with fluorinated organic radicals. Treatment of 2-nitrobromobenzene with CF3SO2Cl in DMF containing copper at 140° for 1 h gave 2-nitrotrifluoromethylbenzene.
IT **132502-10-4P 132502-12-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 132502-10-4 HCAPLUS
CN Benzene, 1,4-dinitro-2-(tridecafluorohexyl)-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)



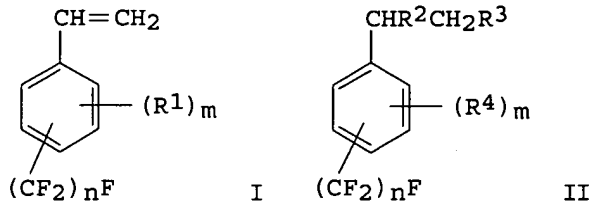
RN 132502-12-6 HCAPLUS
CN Benzene, 2-(heptadecafluorooctyl)-1,3-dinitro-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)



L123 ANSWER 11 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1991:61676 HCAPLUS
DN 114:61676
TI Fluoroalkyl-containing aromatic compounds and their preparation
IN Sawada, Hideo; Mitani, Motohiro; Nakayama, Masaharu
PA Nippon Oils & Fats Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI JP 02200646 A2 19900808 JP 1989-19871 19890131 <--
PRAI JP 1989-19871 19890131 <--
OS MARPAT 114:61676
GI

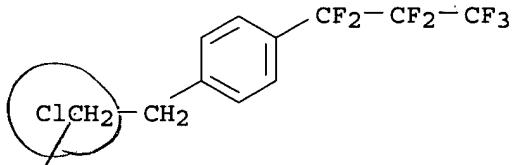


I II

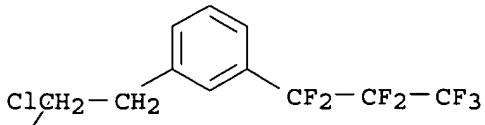
AB The title compds. I (R1 = H, C1-4 alkyl, alkoxy; m = 0, 1; n = 1-10) and II (R2 = Cl, Br, F, OH, Me3SiO, (Me3C)Me2SiO, AcO, MeSO3; R3 = H, Cl, Br, F; R4 = H, C1-4 alkyl, alkoxy; m, n = same as I) are prepared II are prepared by treatment of I with acids or alkalies. Bis(perfluorobutyryl) peroxide in CF2ClCFCl2 was treated with (2-chloroethyl)benzene at 40° for 5 h to give 56% 1-(2-chloroethyl)-4-perfluoropropylbenzene, which was refluxed with KOH in MeOH for 5 h to afford 93% p-perfluoropropylstyrene.

IT **131608-23-6P 131608-24-7P 131608-25-8P**
131608-26-9P 131608-27-0P 131608-28-1P
131608-29-2P 131608-30-5P 131608-31-6P
131608-32-7P 131608-33-8P 131608-34-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and elimination reaction of)

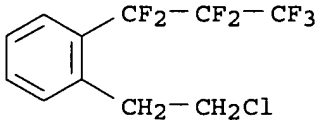
RN 131608-23-6 HCAPLUS
CN Benzene, 1-(2-chloroethyl)-4-(heptafluoropropyl)- (9CI) (CA INDEX NAME)



RN 131608-24-7 HCAPLUS
CN Benzene, 1-(2-chloroethyl)-3-(heptafluoropropyl)- (9CI) (CA INDEX NAME)

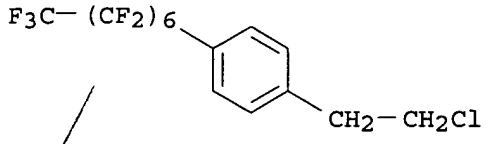


RN 131608-25-8 HCAPLUS
CN Benzene, 1-(2-chloroethyl)-2-(heptafluoropropyl)- (9CI) (CA INDEX NAME)

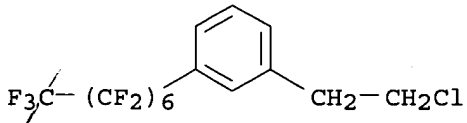


RN 131608-26-9 HCAPLUS

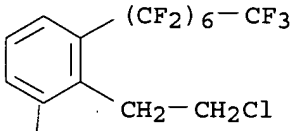
CN Benzene, 1-(2-chloroethyl)-4-(pentadecafluoroheptyl)- (9CI) (CA INDEX NAME)



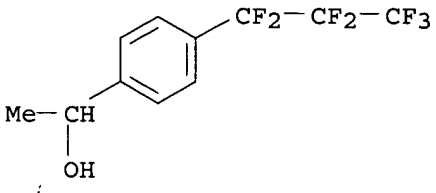
RN 131608-27-0 HCAPLUS
CN Benzene, 1-(2-chloroethyl)-3-(pentadecafluoroheptyl)- (9CI) (CA INDEX NAME)



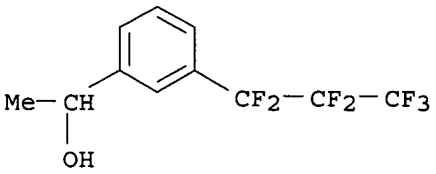
RN 131608-28-1 HCAPLUS
CN Benzene, 1-(2-chloroethyl)-2-(pentadecafluoroheptyl)- (9CI) (CA INDEX NAME)



RN 131608-29-2 HCAPLUS
CN Benzenemethanol, 4-(heptafluoropropyl)-α-methyl- (9CI) (CA INDEX NAME)

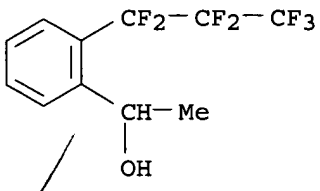


RN 131608-30-5 HCAPLUS
CN Benzenemethanol, 3-(heptafluoropropyl)-α-methyl- (9CI) (CA INDEX NAME)

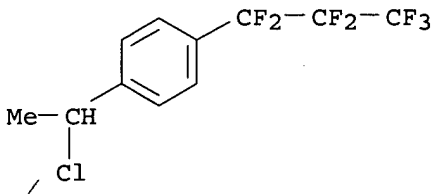


RN 131608-31-6 HCAPLUS
CN Benzenemethanol, 2-(heptafluoropropyl)-α-methyl- (9CI) (CA INDEX

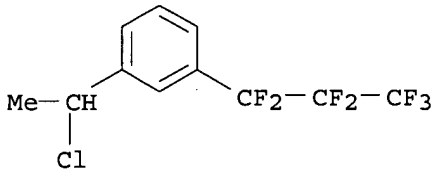
NAME)



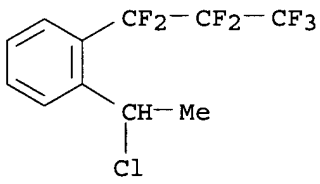
RN 131608-32-7 HCAPLUS
CN Benzene, 1-(1-chloroethyl)-4-(heptafluoropropyl)- (9CI) (CA INDEX NAME)



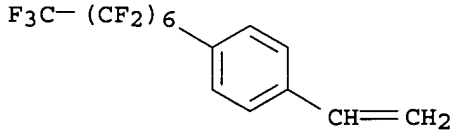
RN 131608-33-8 HCAPLUS
CN Benzene, 1-(1-chloroethyl)-3-(heptafluoropropyl)- (9CI) (CA INDEX NAME)



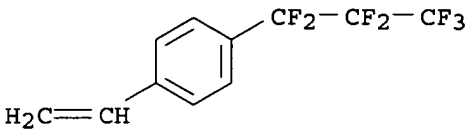
RN 131608-34-9 HCAPLUS
CN Benzene, 1-(1-chloroethyl)-2-(heptafluoropropyl)- (9CI) (CA INDEX NAME)



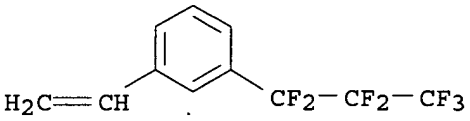
IT **47638-99-3P 131608-35-0P 131608-36-1P**
131608-37-2P 131608-38-3P 131608-39-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 47638-99-3 HCAPLUS
CN Benzene, 1-ethenyl-4-(pentadecafluoroheptyl)- (9CI) (CA INDEX NAME)



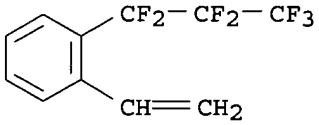
RN 131608-35-0 HCAPLUS
CN Benzene, 1-ethenyl-4-(heptafluoropropyl)- (9CI) (CA INDEX NAME)



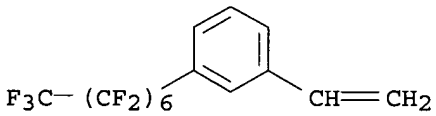
RN 131608-36-1 HCAPLUS
CN Benzene, 1-ethenyl-3-(heptafluoropropyl)- (9CI) (CA INDEX NAME)



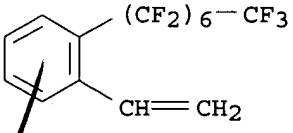
RN 131608-37-2 HCAPLUS
CN Benzene, 1-ethenyl-2-(heptafluoropropyl)- (9CI) (CA INDEX NAME)



RN 131608-38-3 HCAPLUS
CN Benzene, 1-ethenyl-3-(pentadecafluoroheptyl)- (9CI) (CA INDEX NAME)



RN 131608-39-4 HCAPLUS
CN Benzene, 1-ethenyl-2-(pentadecafluoroheptyl)- (9CI) (CA INDEX NAME)

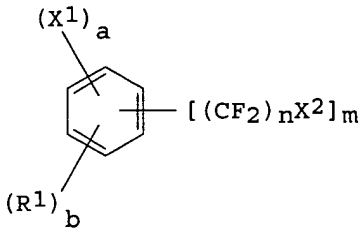


L123 ANSWER 12 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1990:440144 HCAPLUS
DN 113:40144
TI Preparation of perfluoroalkylphenols and -naphthols as drug and agrochemical intermediates
IN Sawada, Hideo; Mitani, Motohiro; Nakayama, Masaharu; Akusawa, Kazuko
PA Nippon Oils & Fats Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF

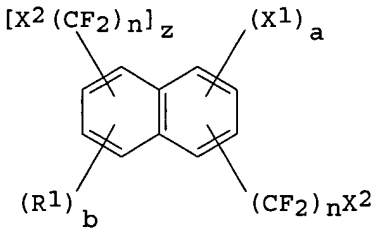
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 02059535	A2	19900228	JP 1988-210662	19880826 <--
PRAI	JP 1988-210662		19880826 <--		

OS MARPAT 113:40144
GI



I

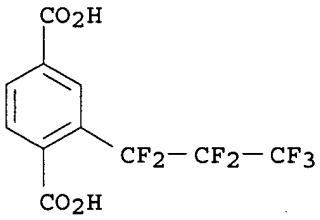


II

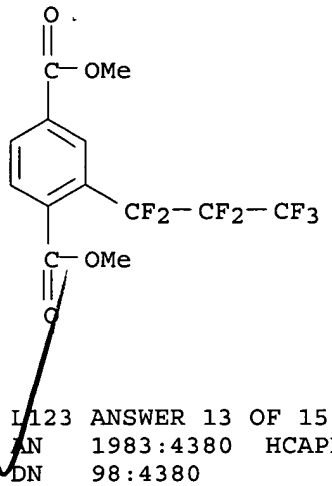
AB The title compds. I [X1 = OH, CO2H, C1-4 alkoxycarbonyl; R1 = halo, C1-4 alkyl, NO2, cyano, etc.; X2 = F, Cl, H; a = 1-3; b = 0-2; n = 1-10; m = 1, 2] and II (z = 0-1; other variables = as given above) were prepared by perfluoroalkylation of aromatic compds. with X2(CF2)nC(:O)OOC(:O)(CF2)nX2. A solution of bis(heptafluorobutyryl)peroxide in 1,1,2-trichlorotirfluoroethane was treated with PhOH at 40° for 5 h to give 93% (heptafluoropropyl)phenol.

IT **128133-78-8P 128133-79-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as drug and agrochem. intermediate)

RN 128133-78-8 HCAPLUS
CN 1,4-Benzenedicarboxylic acid, 2-(heptafluoropropyl)- (9CI) (CA INDEX NAME)



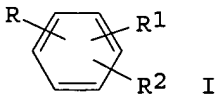
RN 128133-79-9 HCAPLUS
CN 1,4-Benzenedicarboxylic acid, 2-(heptafluoropropyl)-, dimethyl ester (9CI) (CA INDEX NAME)



L123 ANSWER 13 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1983:4380 HCAPLUS
DN 98:4380
TI Perfluoroalkylbenzenes
PA Sagami Chemical Research Center, Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 57142923	A2	19820903	JP 1981-26876	19810227 <--
PRAI	JP 1981-26876		19810227 <--		

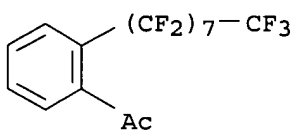
GI



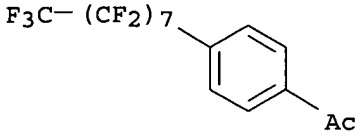
AB (Perfluoroalkyl)benzene derivs. (I; R = perfluoroalkyl; R1,R2 = H, halo, alkyl, H2N, etc.) were prepared by perfluoroalkylation of C6H4R1R2 with RI in Me2SO or DMF. Thus, a mixture of CF3(CF2)I 1, Cu 1, and AcNHPh 0.5 mmol in Me2SO was heated 16 h at 100° in a sealed tube to give 18% I [R = CF3(CF2)7, R1 = H, R2 = 2-AcNH]. Similarly prepared were 18 addnl. I.

IT **83766-56-7P 83766-57-8P 83766-58-9P**
83766-59-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

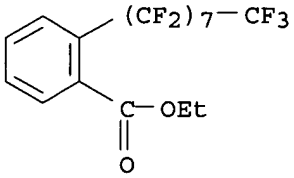
RN 83766-56-7 HCAPLUS
CN Ethanone, 1-[2-(heptadecafluorooctyl)phenyl]- (9CI) (CA INDEX NAME)



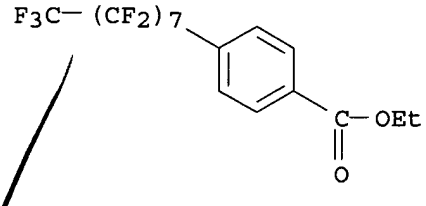
RN 83766-57-8 HCAPLUS
CN Ethanone, 1-[4-(heptadecafluorooctyl)phenyl]- (9CI) (CA INDEX NAME)



RN 83766-58-9 HCAPLUS
CN Benzoic acid, 2-(heptadecafluorooctyl)-, ethyl ester (9CI) (CA INDEX NAME)



RN 83766-59-0 HCAPLUS
CN Benzoic acid, 4-(heptadecafluorooctyl)-, ethyl ester (9CI) (CA INDEX NAME)

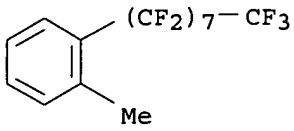


L123 ANSWER 14 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1982:438657 HCAPLUS
DN 97:38657
TI Perfluoroalkyl-substituted benzene derivatives
PA Sagami Chemical Research Center, Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

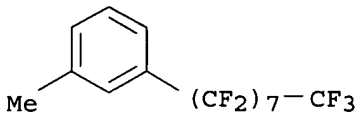
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 57018638	A2	19820130	JP 1980-91790	19800707 <--
PRAI JP 1980-91790	A	19800707 <--		

AB Ten perfluoroalkyl-substituted benzene derivs. RC6H3R1R2 [R, R1 = H, halo, alkyl, alkoxy, (un)substituted NH2; at least one of R and R1 is (un)substituted NH2 or alkyl; R2 = perfluoroalkyl] were prepared by perfluoroalkylation of RC6H4R1 with R2I in the presence of reducing agents under UV irradiation Thus, a mixture of 1 g n-C8F17I and 40 mL 5% aqueous NaHSO3 in PhMe was stirred 10 h under a high pressure Hg lamp to give 290 mg o-, m-, and p-C8F17C6H4Me.
IT **82396-49-4P 82396-50-7P 82396-51-8P**
82396-52-9P 82396-53-0P 82396-55-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 82396-49-4 HCAPLUS

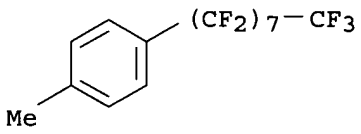
CN Benzene, 1-(heptadecafluorooctyl)-2-methyl- (9CI) (CA INDEX NAME)



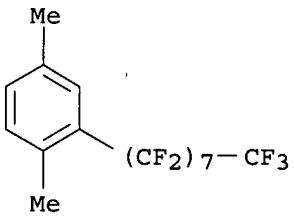
RN 82396-50-7 HCAPLUS
CN Benzene, 1-(heptadecafluorooctyl)-3-methyl- (9CI) (CA INDEX NAME)



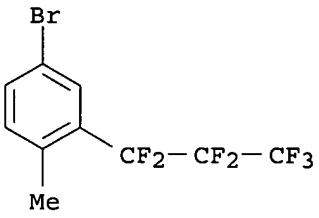
RN 82396-51-8 HCAPLUS
CN Benzene, 1-(heptadecafluorooctyl)-4-methyl- (9CI) (CA INDEX NAME)



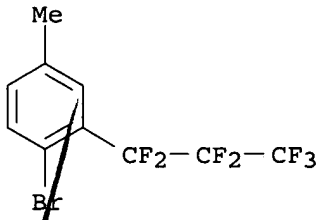
RN 82396-52-9 HCAPLUS
CN Benzene, 2-(heptadecafluorooctyl)-1,4-dimethyl- (9CI) (CA INDEX NAME)



RN 82396-53-0 HCAPLUS
CN Benzene, 4-bromo-2-(heptafluoropropyl)-1-methyl- (9CI) (CA INDEX NAME)



RN 82396-55-2 HCAPLUS
CN Benzene, 1-bromo-2-(heptafluoropropyl)-4-methyl- (9CI) (CA INDEX NAME)



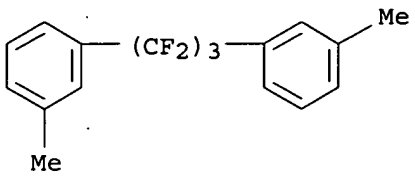
L123 ANSWER 15 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1969:57375 HCAPLUS
DN 70:57375
TI Fluoroalkyl aromatics
IN McLoughlin, Victor C. R.; Thrower, John
PA Minister of Technology
SO U.S., 5 pp.
CODEN: USXXAM
DT **Patent**
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3408411	A	19681029	US 1967-654980	19670721 <--
	GB 1156912	A	19690702	GB 1965-21636	19650521 <--
PRAI	GB 1965-21636	A	19650521 <--		

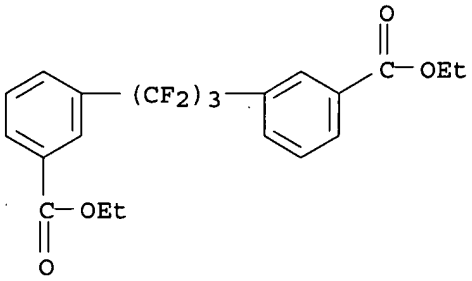
AB A series of title compds. of the type ArR (I) or Ar2R (II) were prepared by the interaction of an aromatic iodide, a perfluoroalkyl halide, and Cu bronze (III). Thus a mixture of 15.5 g. PhI and 10 g. III in 45 ml. Me2NCHO was stirred at reflux as 10 g. n-C3F7I was added beneath the surface over 1 hr., and the mixture refluxed 90 min. and worked up to give 39% I (Ar = Ph, R = n-C3F7), b. 130.2°. Similarly were prepared the following compds. (compound type, Ar, R, m.p., b.p./mm., and % yield given): I, Ph, EtO2C(CF2)3, -, 130-2°/20, 45; I, Ph, n-C7H15, -, -, >30; I, o-O2NC6H4, n-C7F15, -, 120-5°/35, 15-20; I, Ph, F3CCH2, -, 115-20°, 10-15; II, Ph, (CF2)3, -, 133°/5, 60; II, 3-pyridyl, (CF2)3, 63°, -, 53; II, m-MeC6H4, (CF2)3, -, 160-2°/18, 65; II, m-MeOC6H4, (CF2)3, -, 146-50°/0.2, 55; II, m-AcOC6H4, (CF2)3, 58-9°, 140-6°/0.05, 70; II, m-O2NC6H4, (CF2)3, 86°, -, 50; II, p-AcOC6H4, (CF2)3, 76-7°, 160-5°/0.03, 65; II, m-EtO2CC6H4, (CF2)3, -, 149-52°/0.02, 65; II, p-MeO2-CC6H4, (CF2)3, 130°, -, 55; I, 4,6-dimethoxy-2-s-triazinyl, (CF2)3H, 34-8°, 130°/0.2, 20; II, 4,6-dimethoxy-2-s-triazinyl, (CF2)3, 115-18°, -, 1; II, 3,4-(MeO2C)2C6H3, (CF2)3, -, -, 72; I, α-naphthyl, HO2C(CF2)3, -, -, 39; I, 2-methyl-1-naphthyl, n-C7F15, -, -, 45; I, m-AcOC6H4, n-C3F7, -, 92-4°/18, 65; and II, 2-thienyl, (CF2)3, -, -, 30. Also prepared was m-Ph(CF2)3C6H4(CF2)3C6H4(CF2)3Ph-m.

IT **18450-33-4P 21250-01-1P 21250-02-2P**
21250-03-3P 21250-06-6P 21301-84-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

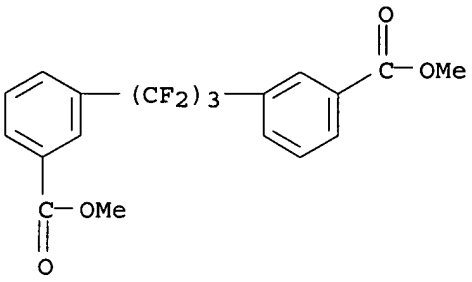
RN 18450-33-4 HCAPLUS
CN Benzene, 1,1'-(1,1,2,2,3,3-hexafluoro-1,3-propanediyl)bis[3-methyl- (9CI) (CA INDEX NAME)



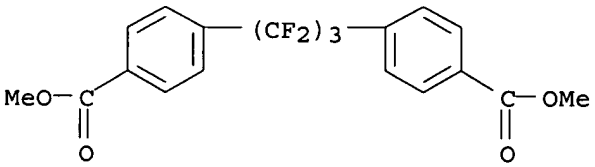
RN 21250-01-1 HCAPLUS
CN Benzoic acid, 3,3'-(1,1,2,2,3,3-hexafluoro-1,3-propanediyl)bis-, diethyl ester (9CI) (CA INDEX NAME)



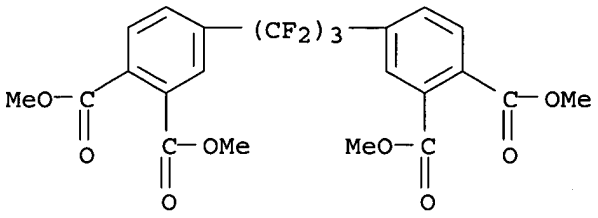
RN 21250-02-2 HCAPLUS
CN Benzoic acid, 3,3'-(hexafluorotrimethylene)di-, dimethyl ester (8CI) (CA INDEX NAME)



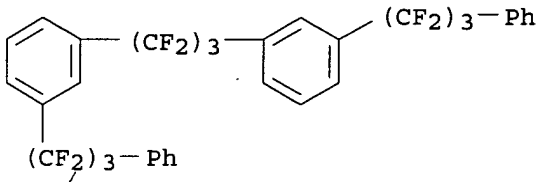
RN 21250-03-3 HCAPLUS
CN Benzoic acid, 4,4'-(1,1,2,2,3,3-hexafluoro-1,3-propanediyl)bis-, dimethyl ester (9CI) (CA INDEX NAME)



RN 21250-06-6 HCAPLUS
CN 1,2-Benzenedicarboxylic acid, 4,4'-(1,1,2,2,3,3-hexafluoro-1,3-propanediyl)bis-, tetramethyl ester (9CI) (CA INDEX NAME)



RN 21301-84-8 HCAPLUS
CN Benzene, 1,1'-(1,1,2,2,3,3-hexafluoro-1,3-propanediyl)bis[3-(1,1,2,2,3,3-hexafluoro-3-phenylpropyl)- (9CI) (CA INDEX NAME)



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L125 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:618274 HCAPLUS
DN 135:195695
TI **Fluorous reaction** and separation methods
IN Curran, Dennis P.; De Frutos Garcia, Oscar; Oderaotoshi, Yoji
PA University of Pittsburgh, USA
SO PCT Int. Appl., 77 pp.
CODEN: PIXXD2
DT **Patent**
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001061332	A1	20010823	WO 2001-US5065	20010216 <--
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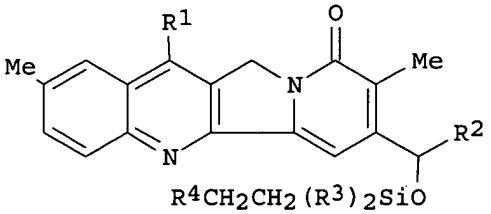
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6749756	B1	20040615	US 2000-506779	20000218 <--
	CA 2400439	AA	20010823	CA 2001-2400439	20010216 <--
	EP 1269170	A1	20030102	EP 2001-910849	20010216 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2003523350	T2	20030805	JP 2001-560670	20010216 <--
	US 2004197829	A1	20041007	US 2004-831087	20040423 <--
PRAI	US 2000-506779	A	20000218 <--		
	WO 2001-US5065	W	20010216 <--		

GI



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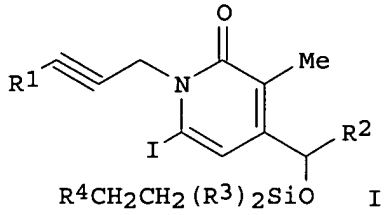

II

AB The present invention provides a fluorous-tagging strategy comprising the steps of: a. tagging a first organic compound with a first tagging moiety to result in a first tagged compound; b. tagging at least a second organic compound with a second tagging moiety different from the first tagging moiety to result in a second tagged compound; and c. separating the first tagged compound from a mixture including the second tagged compound using a separation technique based upon differences between the first tagging moiety and the second tagging moiety, in the synthesis and separation of mixts. of organic compds. including analogs of mappicine, such as, [I; R1 = H, aryl, SiMe2Bu-t; R2 = alkyl, CH2Ph; R3 = alkyl; R4 = alkyl, fluoroalkyl]. Thus, mappicine analogs, such as, I [R1 = H, Ph, SiMe2Bu-t; R2 = Et, Bu-t, CH2Ph; R3 = Me, (Me)2CH,; R4 = C6H13, C4F9, C6F13, C8F17, C10F21] were prepared via radical cyclization of N-alkylated pyridone [II; R1 = H, Ph, SiMe2Bu-t; R2 = Et, Bu-t, CH2Ph; R3 = Me, (Me)2CH,; R4 = C6H13, C4F9, C6F13, C8F17, C10F21] (also prepared) and 4-methylphenyl isonitrile and separated by preparative HPLC with a FluofixTM column.

IT **356055-76-0P 356055-77-1P 356055-78-2P**
356055-79-3P 356055-83-9P 356055-85-1P
356055-86-2P 356055-87-3P
RL: PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(fluorous-tagging strategy for synthesis and separation of mixts. of organic compds.)

IT **356055-80-6P 356055-81-7P 356055-82-8P**
356055-84-0P 356055-88-4P 356055-89-5P
356055-90-8P 356055-91-9P 356055-92-0P
356055-93-1P 356055-94-2P 356055-95-3P
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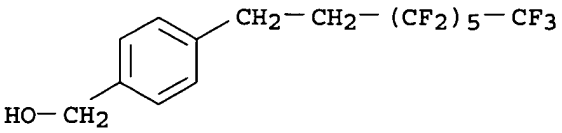
356056-35-4P 356056-36-5P 356056-37-6P
356056-38-7P 356056-39-8P 356056-40-1P
356056-41-2P
RL: PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)
(fluorous-tagging strategy for synthesis and separation of mixts. of organic compds.)

IT **356055-76-0P**
RL: PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(fluorous-tagging strategy for synthesis and separation of mixts. of organic compds.)

RN 356055-76-0 HCAPLUS

CN Benzenemethanol, 4-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)- (9CI) (CA INDEX NAME)



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Jackson	1994			US 5340453 A	HCAPLUS
Wang	1984			US 4454233 A	HCAPLUS

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E ZHANG W/AU
L3 1582 S E3-E26
E ZHANG WEI/AU
L4 6827 S ZHANG WEI?/AU
E LUO Z/AU
L5 63 S E3,E19
E LUO ZHI/AU
L6 69 S E3,E32,E86
E NAGASHIMA T/AU
L7 168 S E3,E5
E TADAMICHI/AU
E CHEN C/AU
L8 1553 S E3,E18,E22
E CHEN CHRIS/AU
L9 7 S E3,E7
L10 29 S E15-E18
E YU M/AU
L11 207 S E3,E24
E YU MARVIN/AU
L12 17 S E3-E5
E SUNGWHAN/AU
SEL RN L1

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L15 1 S C18H11F17O2 AND L13
L16 1 S C29H18F17NO5 AND L13
L17 1 S C16H8BRF17 AND L13
L18 2 S C17H10BRF17 AND C6/ES
L19 0 S C27H14CLF17
L20 39 S L13 AND F/ELS
L21 35 S L20 NOT L14-L18
L22 24 S L21 AND F>=4
L23 28 S L14-L17,L22
L24 30 S L18,L23

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L25           2 S L24

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L27           8 S L24 NOT L26

     FILE 'HCAPLUS' ENTERED AT 07:09:29 ON 12 APR 2005
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L29           5 S L28 AND L1-L12
L30           4 S L29 AND (FLUOR?(L)TECH?)/PA,CS
L31           5 S L29,L30
L32          14 S L28 NOT L31
L33          12 S L28 AND (PD<=20020711 OR PRD<=20020711 OR AD<=20020711)
L34           3 S L32 NOT L33

     FILE 'REGISTRY' ENTERED AT 07:12:31 ON 12 APR 2005

     FILE 'HCAPLUS' ENTERED AT 07:12:40 ON 12 APR 2005

     FILE 'REGISTRY' ENTERED AT 07:13:23 ON 12 APR 2005
L35               STR
                  E F/ELS
L36               SCR 1968
L37          50 S L35 AND L36
L38       35612 S L35 AND L36 FUL
                  SAV TEMP L38 SHIAO617A/A
L39               STR L35
L40          50 S L39 SAM SUB=L38
L41        7096 S L39 FUL SUB=L38
                  SAV TEMP L41 SHIAO617A1/A
L42               STR L39
L43          50 S L42 SAM SUB=L41
L44        4708 S L42 FUL SUB=L41
                  SAV TEMP L44 SHIAO617A2/A
L45               STR L42
L46          50 S L45 SAM SUB=L44
L47        3542 S L45 FUL SUB=L44
                  SAV TEMP L47 SHIAO617A3/A
L48        3179 S L47 NOT (PMS OR MXS)/CI
L49          72 S L48 AND NC4/ES
L50           6 S L49 AND (C18H14F9NO5 OR C20H14F13NO5 OR C23H14F19NO5 OR C22H1
L51          29 S L48 AND OC4/ES
L52         291 S L48 AND S/ELS NOT L49-L51
L53         289 S L52 NOT (CCS/CI OR SQL/FA)
L54               STR L35
L55           1 S L54 SAM SUB=L48
L56           7 S L54 SAM SUB=L38
L57         130 S L54 FUL SUB=L38
                  SAV L57 TEMP SHIAO617A4/A
L58          23 S L57 AND L41
L59           3 S L58 AND (C19H12CLF17O2 OR C18H8CLF17O2 OR C18H10CLF17O2)
L60           9 S L50,L59
                  SAV TEMP L60 SHIAO617A5/A
L61           7 S L60 NOT L26

     FILE 'HCAOLD' ENTERED AT 07:55:25 ON 12 APR 2005
L62           0 S L61

     FILE 'HCAPLUS' ENTERED AT 07:55:28 ON 12 APR 2005
L63           6 S L61
L64           1 S L63 AND L1-L12
L65           4 S L63 AND (PD<=20020711 OR PRD<=20020711 OR AD<=20020711)
L66           5 S L64,L65
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L67           1 S L63 NOT L66

     FILE 'REGISTRY' ENTERED AT 07:56:30 ON 12 APR 2005

     FILE 'HCAPLUS' ENTERED AT 07:56:48 ON 12 APR 2005

     FILE 'REGISTRY' ENTERED AT 07:57:42 ON 12 APR 2005
L68             STR
L69           50 S L68
L70      2012368 S 46.150.18/RID AND F/ELS
L71           50 S L68 AND L36 SAM SUB=L70
L72              SCR 1044
L73           50 S L68 AND L36 AND L72 SAM SUB=L70
L74        37805 S L68 AND L36 AND L72 FUL SUB=L70
                 SAV TEMP L74 SHIAO6A7B/A
L75          905 S L38 AND SI/ELS NOT (PMS OR CCS)/CI
L76              STR L39
L77              STR L76
L78           12 S L77 FUL SUB=L38
L79            3 S L78 AND 1/CL
L80            1 S L79 AND C32H18CLF39O2SI

     FILE 'HCAPLUS' ENTERED AT 08:08:54 ON 12 APR 2005
L81            2 S L80

     FILE 'REGISTRY' ENTERED AT 08:09:29 ON 12 APR 2005
                 SAV L78 SHIAO617A6/A
                 DEL SHIAO6A7B/A
                 SAV TEMP L74 SHIAO617B/A
L82              STR L45
L83           50 S L82 SAM SUB=L74
L84        16196 S L82 FUL SUB=L74
                 SAV TEMP L84 SHIAO617B2/A
L85              STR L82
L86           50 S L85 SAM SUB=L84
L87              STR L85
L88              STR L82
L89        16283 S L88 FUL SUB=L74
                 DEL SHIAO617B2/A
                 SAV TEMP L89 SHIAO617B2/A
L90           50 S L87 SAM SUB=L89
L91              STR L87
L92           50 S L91 SAM SUB=L89
L93         7961 S L91 FUL SUB=L89
                 SAV TEMP L93 SHIAO617B3/A
L94              STR L91
L95           50 S L94 SAM SUB=L89
L96         4820 S L94 FUL SUB=L89
                 SAV TEMP L96 SHIAO617B4/A
L97        11342 S L93,L96
L98              STR
L99           50 S L98 SAM SUB=L97
L100       11327 S L98 FUL SUB=L97

     FILE 'HCAPLUS' ENTERED AT 08:40:52 ON 12 APR 2005
L101        2509 S L97
L102           4 S L1-L12 AND L101
                 SEL HIT RN

     FILE 'REGISTRY' ENTERED AT 08:41:38 ON 12 APR 2005
L103          63 S E1-E63
L104          58 S L103 NOT L26,L61,L80
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     FILE 'HCAPLUS' ENTERED AT 08:42:48 ON 12 APR 2005
L105        2505 S L101 NOT L102
L106        2228 S L105 AND (PD<=20020711 OR PRD<=20020711 OR AD<=20020711)
L107         460 S L106 AND BENZEN?/SC,SX
L108           0 S L107 AND TAGGING
L109           0 S L107 AND TAG?
L110           3 S L107 AND SCAVEN?
                 E SCAVEN/CT
                 E E19+ALL
L111        6664 S E2+NT
                 E HALOALKYLATION/CT
L112         504 S E3-E12
                 E E3+ALL
L113         492 S E3+NT
                 E COMBINATORIAL/CT
L114       22605 S E7+OLD,NT,PFT,RT
L115       37252 S E5+OLD,NT,PFT,RT
                 E E5+ALL
L116       17055 S E6+OLD,NT,PFT,RT
L117          58 S L106 AND L111-L116
L118          39 S L117 AND L107
L119          48 S L117 AND L112,L113
L120           0 S L119 AND L111
L121           0 S L119 AND L114-L116
L122          19 S L117-L119 AND P/DT
L123          15 S L122 AND L112,L113

     FILE 'REGISTRY' ENTERED AT 08:47:53 ON 12 APR 2005

     FILE 'HCAPLUS' ENTERED AT 08:48:07 ON 12 APR 2005
L124           4 S L122 NOT L123,L102
L125           1 S L124 AND FLUOROUS REACTION/TI

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